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# THE LAND OF HEALTH

HALLOCK AND WINSLOW

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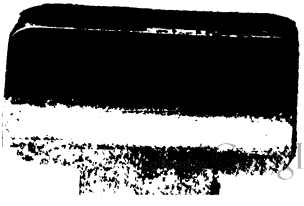

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# THE LAND OF HEALTH

## HOW CHILDREN MAY BECOME CITIZENS OF THE LAND OF HEALTH BY LEARNING AND OBEYING ITS LAWS

BY

GRACE T. HALLOCK

OF THE CHILD HEALTH ORGANIZATION OF AMERICA

AND

C.-E. A. WINSLOW

PROFESSOR OF PUBLIC HEALTH, YALE MEDICAL SCHOOL, AND CURATOR OF PUBLIC HEALTH, AMERICAN MUSEUM OF NATURAL HISTORY

WITH A CHAPTER ON EXERCISE

BY

WALTER CAMP

CHARLES E. MERRILL COMPANY

NEW YORK AND CHICAGO

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## THE WINSLOW HEALTH SERIES

By

C.-E. A. WINSLOW

Professor of Public Health, Yale Medical School, Curator of Public Health, American Museum of Natural History

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*The Land of Health*

By GRACE T. HALLOCK and C.-E. A. WINSLOW.

For the lower grades.

*Healthy Living, Book One*

By C.-E. A. WINSLOW.

For the intermediate grades.

*Healthy Living, Book Two*

By C.-E. A. WINSLOW.

For the upper grades and the junior high school.

Each book contains a chapter on physical exercise by WALTER CAMP.

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## PREFACE

Can hygiene be taught to children of eight, nine, ten years of age?

We think it can, and we hope this book, THE LAND OF HEALTH, is going to prove it.

We believe that the one best way to teach hygiene to boys and girls is by telling them stories. In a large measure the same thing is true for grown people too.

Teaching by story-telling (or story-observing) is used in the case system in law and the clinical clerk system in medicine—two of the highest developments of modern education; and both owe much of their value to the dramatic element, as well as to the concreteness, which is involved. It was by experience, not by words and phrases, that the human race acquired its first knowledge of Nature, and it is by experience chiefly that the child learns to-day. A good story is an experience. The natural forces that affect Healthy Living are, we hope, personified in this book as the Greeks would have personified them. Wind and Rain and Sun were the teachers of mankind in its golden youth and in these pages they will teach our young people of the present day.

A story is the best device that we possess for



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arresting the attention. If the lesson is to be fixed, however, it must appeal to an internal aspiration, to some motive which will seize upon it and make it vital. In the teaching of hygiene, this motive varies with different ages. For the middle-aged the avoidance of disease is a compelling force; for the youth community service may be emphasized. With younger children these things have no appeal. THE LAND OF HEALTH attempts a different note. These stories have the ultimate motive of vigorous, buoyant health as a condition of happiness; and happiness is, and ought to be, the objective of childhood.

There is another parallel here with the spirit of ancient Greece. In Athens they understood, as never before or since, the beauty of physical health, the nobleness of physical vigor. We are at last beginning to conceive the ideals of health in something of the Greek spirit. It was our own American philosopher and humanist, William James, who said, "Simply to live, move, and breathe should be a delight." May this book reveal to many children in these United States a clear vision of the gospel of Healthy Living, which makes the sound mind in the sound body a primary objective of the individual and community life.

C.-E. A. WINSLOW

New Haven
May, 1922

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# THE LAND OF HEALTH

## CHAPTER I

## THE MOST WONDERFUL THING IN THE WORLD

Tom and Sally lived with their mother and father in a house at the edge of a town. The house was white with green blinds. Behind it there was a meadow full of long sweet grass that Clover, the cow, loved to eat. A clear brook flowed through the meadow. In the shallow places it sang over the stones. In the deep places it was very still and cool.

Tom was ten years old. He had brown hair and eyes, and round red cheeks. Sally was a year younger than Tom. Her hair was long and yellow, and her eyes were as blue as the Canterbury bells that grew in their flower garden.

One Saturday afternoon in September Tom and Sally were picking up the apples that had fallen from the greening apple tree at the edge of the meadow. They carried the apples to Mother, who was sitting in a red rocker under the tree.



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She was peeling them to make apple sauce for supper.

Finally Mother said she had enough apples, so Tom threw himself down under the tree and asked Sally to read a story. On her last birthday Tom had given her a book of stories from the "Arabian Nights." She ran to get it now from the tin box in a crotch of the tree, where she and Tom kept their treasures. Then she sat on a little wooden stool at Mother's feet and opened the book. "I'll read about Aladdin's lamp," she announced. This was their favorite story.

When she had finished, Tom sighed. "I wish I had Aladdin's lamp," he said. "I'd wish for the most wonderful thing in the world."

"What *is* the most wonderful thing in the world?" asked Sally, who thought that Tom must know everything as he was a year older than she.

"Why, yes," replied Tom, with a puzzled frown. "What *is* it? Let me think." And he gave his forehead a hard rub. "I think it must be money. If you have money, you can buy anything you want."

Mother stood up and smoothed her big white apron. "There was once a man named Midas,

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Mother, Sally, and Tom under the greening apple tree.

who thought so too," she said, "but he changed his mind. I'm going up to put the apples on now," she added. "If you think hard until supper time, perhaps you will guess what the most wonderful thing in the world is."

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"The most wonderful thing in the world," repeated a dreamy voice. The children turned and saw a bent old man sitting in Mother's little red rocker. He wore a crown and his long robes were covered with jewels. He was silent so long that finally Tom cleared his throat. The old man jumped. "I beg your pardon," he said. "My name is Midas. I have come to tell you about the most wonderful thing in the world. It's all so peaceful here—I almost thought I was back in my own garden. And this little girl "—he smiled at Sally—"is just about the size of Marigold. Well, well, I must begin." And this was his story.

I was once a great king. All through my early life I thought that gold was the most wonderful thing in the world. Every piece of gold that came to my hands I hid in a dark room under my palace. Every day I went to this room to plunge my arms in gold. I thought I was never so happy as then, not even when I held my little daughter Marigold in my arms.

The only light in that dark room came from a tiny barred window. In the late afternoon one sunbeam shot for a moment through this window to turn my heap of gold into little glittering flames.

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One afternoon I looked up from my gold just as the sunbeam came through the window. There in its light stood a stranger. Little golden rays flickered about his head like sunlight among leaves. I wondered if this stranger could be a god. He looked at all my gold and smiled.

"Are you happy, Midas, now that you know you are the richest man in the world?"

I shook my head. "No, stranger, I am not satisfied."

"What would satisfy you then?"

I thought very hard. If this stranger should truly prove to be a god, he could grant my desire.

I answered slowly: "Gold is hard to gain. I wish that everything I touch may be turned to gold."

The stranger laughed. "The golden touch! Your wish is granted, King Midas. After the sun has risen in the morning, everything you touch will be gold." The sunbeam slipped out the window. The stranger was gone.

I could hardly wait for morning to come. When the first ray from the rising sun fell on my bed, I was overjoyed to find that the bed coverings were changed to purest gold. I leaped up and started to put on my clothes. I found myself

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in robes of cloth of gold. I ran down the stairs. Each step became a solid block of yellow metal.

I went out into my garden. I had always loved this garden. The wind blew softly through the flowers and brought me the warm, sweet odor of a hundred roses. I could see them nodding at me from the bushes, heavy with morning dew. But I thought that I could make them even more beautiful. I touched each rose with my finger, and instantly the petals were delicate plates of thin gold.

Then I went in to my breakfast. At my plate I found a little brook trout done to a turn, two soft-boiled eggs, oat cakes, and honey. A bowl of bread and milk was waiting for my daughter Marigold. I took up my fork and it became heavy gold. Then I lifted the fish to my plate, and by accident I touched its tail. It was turned to as pretty a little golden fish as one could ever hope to see. But it was certainly not to be eaten. I picked up an egg to break it open. It was a heavy mass of gold in my hand and so hot that it burned my fingers.

What was to be done? I began to think I should starve to death. Just then Marigold came running into the room. She was a darling

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little girl, and this morning she looked very sweet indeed. She started eating bread and milk after she had curtsied good-morning. I watched her with great envy.

I decided to make one last attempt to eat my

"Dear Father, what is the matter?" cried little Marigold.

breakfast. So I quickly crammed a hot oat cake into my mouth, thinking I might swallow it before it turned to gold. But the golden touch was too quick for me. I found my mouth filled with hot metal, and I jumped up and began to stamp my feet, the pain was so great.

Marigold ran swiftly to me. "Dear Father, what is the matter?" she cried, and started to throw her arms about me. But at the first touch

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she suddenly stiffened, and the next instant my little Marigold stood before me a golden statue.

In that moment I realized what a fool I was. What was all the gold on earth to the pink in my little daughter's cheeks? LIFE! That was the most wonderful thing in the world! I looked up with tears in my eyes and saw the stranger standing in the door.

"Are you satisfied now, oh, King?" he asked.

"Oh, no," I cried, wringing my hands.

"Which would you rather have, a glass of water or the golden touch?"

"Water!"

"A crust of bread or the golden touch?"

"The crust!"

"Little Marigold, warm and living in your arms, or the golden touch?"

"Marigold!" I moaned. "One dimple in her cheek is worth all the gold on earth."

The stranger smiled. "You have learned your lesson well," he said. "Go bathe in the river at the foot of your garden, and it will wash the golden touch away forever. Sprinkle some of the river water on whatever you wish changed back from gold to its former state. Farewell!" And the stranger was gone.

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You may be sure I hastened to obey him. The first thing I did after I came from the river was to sprinkle some of the water over Marigold. And there she was, a laughing little girl again, very much surprised to find herself so wet.

We went together and sprinkled the roses. It was a great joy to me to see them turn from ugly golden stiffness back to soft, pink, living flowers again. Always remember this, children: LIFE is the most wonderful thing in the world!

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## CHAPTER II

## DAME NATURE AND HER FIVE HELPERS

It was Tom's birthday. On the floor of the playroom a complete toy village was laid out. Tom's father had given it to him, and both he and Sally were very happy indeed. They had always wanted just such a village.

Supper was over and they were playing with it before bedtime. There were five houses in the village and a grocery, a school, a church, and a Town Hall. All the houses were painted white and had red roofs. A single street, shaded with green trees, ran through the village. Just beyond was a farm.

Sally loved the farm best of all. A little orchard grew beside it, and it was all in blossom. A meadow covered with grass stretched beyond the orchard. In it were a tiny red and white cow, four speckled hens, and a shiny green and black rooster. The farmer was walking in his meadow.

On the porch of the farmhouse a woman was sitting in a rocking chair holding a baby. A



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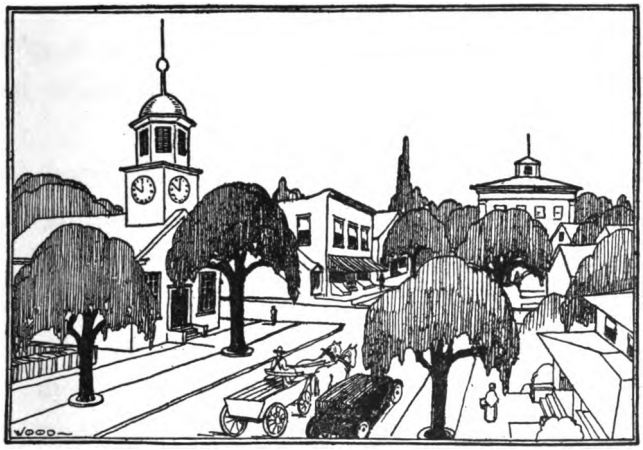
little boy and girl were in the yard. The grocer stood in the door of his store. It was a wonderful village—and so clean and neat!

Tom and Sally took the farmer's family down the street for a walk and brought them back



The toy village was shaded with green trees.

again. As Sally put the woman and her baby into the chair on the porch, she thought how cunning the baby looked asleep in his mother's arms. "Oh dear," she sighed, "wouldn't it be lovely if they could all come to life?"

"It *would* be fun," said Tom. "You know, since we learned that life is the most wonderful thing in the world, I've thought and thought! What is life anyway?"

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"Well, that *is* a question!" exclaimed a voice behind them. They turned quickly, and there stood an old lady in the doorway. "I am Dame Nature," she said, smiling at the children.

"Won't you sit down, Dame Nature?" said Tom politely. She looked very much like Grandmother, thought Sally, only she wore a green gown, and her rosy face framed in white hair looked strangely young.

She sat down on a footstool by the open fire. "Life—" she said, as if she were thinking out loud. "You see no one knows what that is, not even I. But I have the seeds of life," she said smiling.

"Oh, have you?" cried Sally and Tom together. "Please, won't you show them to us?"

She shook her head. "You couldn't see them, even if I did. They are very, very tiny. You could hardly believe me if I told you how many you could put on the point of a pin. These seeds are exceedingly precious. I give them only to plants, animals, and human beings. But even though the seeds of life are so wonderful, they cannot make anything live and grow without help. Now, I think I heard Sally wishing that

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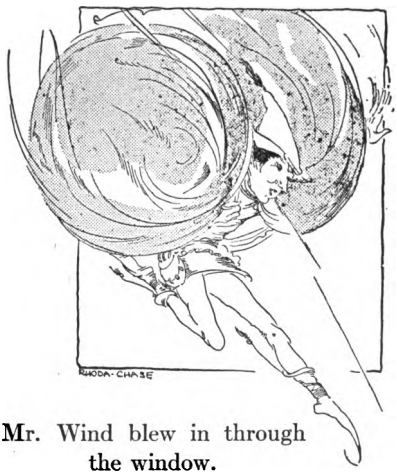
the toy village could be brought to life. Would you like to have me try it?"

"Oh, yes," whispered Sally. She had never dreamed of anything like that really happening.

Dame Nature put her hand deep down into her pocket and pulled something out. The children couldn't see that she had anything at all in her hand. For all that, she held it very carefully, palm upward, as if she were afraid of spilling something. Then she turned her hand over above the village. The children leaned forward eagerly. Not a creature in the whole village stirred. Everything was just as it had been before. It was a great disappointment. Sally, indeed, was ready to cry.



Mr. Wind blew in through the window.

"Just as I said," muttered Dame Nature. "We'll have to have a little help." She gave a

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long whistle. In through the open window blew a tall, thin fellow with puffed-out cheeks. He was wrapped in a long purple cloak that billowed out above his head.

"Mr. Wind," said the Dame, "these children and I are trying an experiment, and we decided we would have to have a little air. Will you give some to this village?"

Madame Rain sprinkled water over the red roofs.

"Certainly, Madame," said Mr. Wind, bowing low. At the same time he puffed a great breath over the village. The next moment the children heard him whistling through the trees outside.

Still the village remained as before. The Dame clapped her hands lightly. A beautiful lady came in through the window. She sounded like rain pattering on the roof. "Madame Rain," said Dame Nature, "will you kindly water this village for us?"

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"With the greatest of pleasure, Madame," she replied, as she shook her fingers above the red roofs. Then out she ran, patter—patter. Tom was sure he saw the farmer take a step, and Sally thought she heard the rooster crow. But although the village stirred gently like a baby in its sleep, it was still far from being really alive.

"I'll have to call on my Lord the Sun," said the Dame. She went to the window and sang a queer little song. A long beam of sunlight came tumbling into the room and shone on the village. "Thank you, my Lord," called Dame Nature.

My Lord the Sun sent a sunbeam tumbling into the room.

The children began to clap their hands. The village was coming to life at last. The baby stirred and the woman started to rock him. The boy and girl threw a ball back

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and forth to each other. In the meadow the rooster gave an unmistakeable crow. The farmer walked around his farm with an air of great pride. The grocer went into his shop and pulled up the shades.

Sir Food stepped out of the fireplace.

But in a few minutes the movements became slower and slower. Tom saw that the children's cheeks were growing pale. "Look!" he cried, "they're going to die."

"To be sure!" said the Dame. "We forgot food. They can't possibly live long without that." She rang a silver bell hanging at her side. An odd little man stepped out of the fireplace. He was short and fat and wore a cook's cap and apron. "Sir Food," said the Dame, "the people in this village are starving to death."

"Oh my!" he cried, much distressed, "we

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can't have that." He waved his fat hands over the village and disappeared. The woman who had been sitting on the porch got up and went into the house. Smoke began to pour out of the chimneys. The farmer found a pail and started to milk the cow. The rooster and hens began scratching for worms in the meadow.

Tom and Sally were delighted. They watched the little people going about the business of the day for a long time. Then they noticed that the beam of sunlight was slowly fading. The boy and girl went to sit on the steps of the farmhouse, as if they were very tired. The baby gave a little whining cry, and the woman tried to hush him, but he cried harder than ever. The farmer stopped digging in the orchard and sat down under an apple tree. The blossoms on the trees closed their petals. Dame Nature began to croon a soft lullaby. A slender figure in gray

Lady Sleep shook her silver horn over the village.

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slipped through the window and shook shining dust from a silver horn over the village. The children looked again. Trees, animals, and people were fast asleep. "Nothing can live without Lady Sleep," said Dame Nature very softly.

"Well, children," said a voice at the door, "what did you learn in school to-day?" It was their father. He was coming in to say good-night, as he always did.

Tom rubbed his eyes and looked at the village. Then he looked at Sally. She seemed puzzled over something. "Why," replied Tom slowly, "we learned that nothing can live and grow without air and water and—and," he stopped to think. "Sunlight and food and sleep," finished Sally with a rush.

"That is very true," said Father. "If you and Sally want to be healthy and happy all your lives, you will always have for friends Fresh Air, Pure Water, Sunlight, Good Food, and Sleep. I think I hear Lady Sleep calling you now," he ended with a smile, as he kissed them good-night.

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## CHAPTER III

## THE NATURALIZATION LAW OF THE LAND OF HEALTH

Father looked up from the newspaper he was reading. "Tony, the baker, is a citizen at last," he said to Mother. "I saw him in the village just before I came home for supper. He is giving a party to-night to celebrate."

Mother nodded her head. "I know about it," she said. "I saw his wife this afternoon. I believe she is just as pleased as Tony is."

The whole family was sitting about the open fire in the living room. Tom and Sally were playing checkers, but they stopped to ask about Tony. He was a great friend of the children's as he often gave them rides in the bakery wagon.

"Why is it such a wonderful thing to be a citizen, Father?" asked Tom.

"There are many reasons, Tom," replied Father. "When a person is a citizen of a country, he is protected by the government of that country wherever he may be. If Tony should go to Italy for a visit and be hurt there in any way,



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the United States would see that Tony was given justice for his hurt. In most countries a citizen also has the right to vote for the people whom he wants to have govern his country and make its laws. In return, he must obey the laws of the country, and be loyal and true to the principles for which it stands."

"But, Father," said Sally, "why did Tony have to be made a citizen?"

"Well, you see, Sally, Tony wasn't born in this country. He came from Italy a little over five years ago. Now the law of the United States says that if a person is not born here, he must become naturalized if he wishes to be a citizen. First, he must go to a judge and say that he wishes to be a citizen. Then he receives what we call his first papers.

"When he has lived here five years, he goes before a judge again. The judge finds out whether he understands the principles which the United States stand for. He also sees whether the man can speak and understand English. Then he gives him a paper that makes him a citizen. Tony went to get his first papers just a little while after he landed in this country. To-day he was given the second paper, which makes

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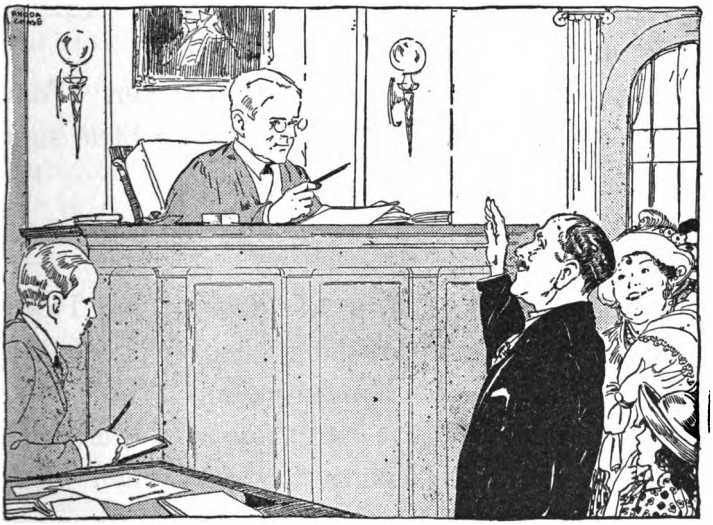
him a full citizen. Naturally he is very proud."

"It's like being promoted in school. We get a paper then," said Sally.

"Yes," replied Father, "it is a little like that. Only it means very much more to Tony to be



Tony is proud to become a full citizen of the United States.

a citizen of the United States than it did to you and Tom to be promoted from the third to the fourth grade." Father went back to his paper with a smile.

"Have you named your village yet, Tom?" asked Mother, looking up from her sewing.

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"No, I haven't," replied Tom. "Sally and I can't think of a single name we like."

"You might call it Happy Village," said Mother.

"That *is* a nice name, Mother," said Tom. "I do think we'll call it that. Shall we, Sally?"

"It's a lovely name," cried Sally. "Let's hurry and christen it."

They ran up to the playroom together. Tom set to work with his paints to make a little sign

HAPPY VILLAGE

that could be glued over the door of the Town Hall. Sally began brushing the street of the village with her doll's house broom. "You know, Tom," she said, "if we had some of the mixture that made Alice in Wonderland grow small when she drank it, we could make ourselves little enough to walk right down this street."

"I know it," said Tom, with a sigh. "Wouldn't it be fun!"

The words were hardly out of his mouth before the children found themselves walking along the village street! The strange thing about it was that Tom and Sally hadn't become any

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smaller, but the village had grown larger. Under a tree in the meadow Sally saw a familiar figure. "Why, it's Dame Nature," she cried.

The children ran toward her through the tall grass. "Hello, Tom and Sally," she called. "Do you like my village?"

"It's beautiful," panted Sally, throwing herself down in the grass. Tom seated himself on a stone and fanned himself with a burdock leaf.

"Do you know where you are?" asked Dame Nature.

"We're in Happy Village, of course," said Tom.

"Yes, but do you know what country?" Tom shook his head. "You are in the Land of Health," replied the Dame.

"It's a lovely country," murmured Sally softly. Indeed it was! A spicy wind blew through the buttercups and clover in the meadow. Yellow butterflies drifted in and out of the warm sunlight and cool shadow. The green and black rooster hopped up on a hillock, flung back his head, and crowed joyously. Even the red and white cow looked happy. Over in the farmyard the children were having a jolly time running races.

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"I should like to be a citizen of *this* country," said Tom, putting down his leaf fan.

"Would you?" said the Dame. "I'm the Queen here, you know. Perhaps I can arrange it. I'll have to call in the Judge to explain the law first, though."

She whistled, and in the wink of an eyelash Mr. Wind stood beside her, his cheeks as puffy as ever. "Mr. Wind," requested the Dame, "will you ask the Judge to come here a moment?"

"Whish, whe-e-e-e," went Mr. Wind, and off he blew. He came back almost immediately with the strangest looking old gentleman the children had ever seen. He wore a white wig and a black gown, but he had only one arm, and he appeared to be rather stiff. When he moved, he rattled. "It's his weights, you know," whispered Mr. Wind. "His name is Judge Scales." And away flew Mr. Wind.

"Judge," said the Dame, "these children would like to become citizens of the Land of Health. Will you read them the law?"

The Judge cleared his throat. It made him rattle worse than ever. Then he pulled a paper from the folds of his gown and began to read:

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NATURALIZATION LAW OF THE LAND OF HEALTH

1. Before any person is admitted to citizenship, that person must learn the laws and keep them.
2. He must weigh what is right for a person of his height and age.
3. The citizens of this land are given strong bodies and cheerful minds, to make them happy and keep them from harm for the rest of their lives. In return, they must give obedience to its laws and help protect it from the enemy.

The Judge bowed to Dame Nature and started to walk away. "Oh, Judge, you forgot to give them their first papers," cried Dame Nature.

"To be sure," mumbled the Judge. "I'm so overworked these days that I'm getting absent-minded." He pulled out two sheets of green paper that looked like lettuce leaves. He handed them to the Dame, who wrote Sally's name on one and Tom's on the other. Sally read hers out loud:

This is to certify that *Sally* wishes to become a citizen of the Land of Health.

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"Now then," said Dame Nature briskly, after the Judge had left them, "you must start learning the laws. The very best way to do that is to have my ministers give you lessons. You

Tom and Sally are happy when Judge Scales gives Dame Nature their first papers.

know them, don't you? Their names are Mr. Wind, Madame Rain, my Lord the Sun, Sir Food, and Lady Sleep. I'll send Mr. Wind to you to-morrow evening. Then I'll send the others in turn until you know all the laws."

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"Time to go to bed, children," said their mother's voice.

"Oh, Mother," cried Sally, giving a little jump. "We are having such a lovely time playing with the village. We don't want to go to bed yet."

"In just a little while," said Mother smiling, "you will find yourself in the Garden of Dreams. You and Tom want to be healthy, don't you, so that you can play as hard as you like, and learn your lessons easily? Well, the Garden of Dreams lies in the Land of Health."

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## CHAPTER IV

## FRESH AIR AND ITS MAGIC GIFT

Smack! went the wind against the window-pane, leaving a rather breezy kiss. "It's Mr. Wind; he wants to come in," said Tom, looking up from a book.

"Wait just a minute, Mr. Wind," called Sally. She opened the window and—whe-e-e-e, Mr. Wind leaped over the sill.

"All ready for lessons?" he asked, walking up and down the playroom. (He is a restless fellow and can never sit still.) "Dame Nature tells me that you children want to be citizens of the Land of Health," he went on, "and she has sent me to teach you the first law."

"What is the first law, Mr. Wind?" asked Tom.

"The first law is *Breathe plenty of fresh air.* I move the air about, you know. I have a great many different names. When I stir the air gently, I'm called Breeze; and when I make it travel very fast indeed, my name is Tempest. When I take air in and out of buildings, I have a long name, Ventilation. This name comes from an



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old word meaning little wind." He nodded his head. "Yes, indeed, I have a great many disguises, and sometimes it's very convenient, I assure you.

"You see, air has to go everywhere or people couldn't live. And yet you have no idea how some people treat me. When they go to bed at night, they shut all the windows and doors so that I can't let any fresh air in. I have to boost it in through the keyhole. Imagine that!"

"Why can't people live long without air, Mr. Wind?" asked Sally.

"Because everything that lives must have the magic gift that air brings them. It is one of Dame Nature's laws. This gift is called oxygen. Whenever you look at a fire, you see oxygen at work, for that is what makes the fire burn. Your body must have oxygen to live, just as the fire must have it to keep burning.

"You and Tom and all other human beings have two little rooms, called lungs, in which to receive air. You breathe it in through your nose into your throat, and down a little passage-way, called the windpipe, into the lungs. Then you breathe it out again. Some of the blood in your body meets the air when it is in the lungs

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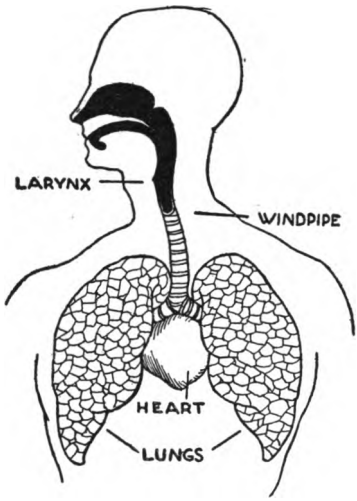
and takes from it the magic gift of oxygen. This gift is carried by the blood all over the body, so that every part of the living material that makes up your body, even to the tips of your fingers and toes, shall have the oxygen it needs.




This shows the way fresh air reaches your lungs with its magic gift of oxygen.

"The blood also gives something to the air to take out of the body."

"Tom, does your father have to do anything to the furnace fire, besides putting coal on it?"

"Why, yes," said Tom. "He has to shake down the ashes and take them out. Sometimes I help him," he added proudly.

"Well," said Mr. Wind, "your body has left-overs from living that it cannot use, just as the furnace fire has ashes left over from burning. Some of these left-overs pass from the blood to the air when it is in the lungs. If your father

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never took out the ashes from the furnace fire, the fire would go out. If the air never took waste from the blood, the body would die. The air you breathe out is filled with this waste.

"When all the windows are shut in a room where people are, I can't come in to move out the air that has come from the lungs with its load of waste. I can't bring in fresh air with its magic gift of oxygen. The air in such a room is stale and hot, and is full of the waste from people's lungs and the smell from their bodies.

"Stale air is fresh air's wicked stepsister. She steals the red from children's cheeks. She makes them feel tired when they have been sitting in a hot, stuffy room instead of playing out of doors. She makes it hard for them to learn their lessons. She puts a droop in their eyelids and, what is worst of all, she puts crossness in their hearts. I have no patience with stale air. I hustle her off to be tidied up as soon as I come into a room."

"But isn't fresh air ever dirty?" asked Tom. "Sometimes when the window is wide open, I see little specks of dust floating in the sunlight."

"The air is always full of bits of dust that I

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can't help stirring up from the earth now and then," explained Mr. Wind. "But Dame Nature has provided for that. When the air goes through the nose on its way to the throat, the moist lining of the nose catches the dirt particles and holds them back. The nose passages are heated, so that the air is warmed before it reaches the throat and lungs. Cold air full of dust is very bad for the throat. That is why you should always breathe through your nose and never through your mouth.

"And now," said Mr. Wind smiling, "I'm going to tell you a story." And this was his story.

Once upon a time, Fresh Air lived at the end of the world with her stepsister, Stale Air, and her stepmother, Shut Windows. Her stepmother didn't love her at all and would never let her come into the house. She had to sleep in the garden. Of course, Fresh Air rather liked this arrangement.

One day Stale Air set out to seek her fortune. She walked along until she came to a town where all the people seemed in great distress. "Our little princess is very sick," they cried, wringing their hands. "Can you help her, oh, stranger?

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The king has offered a big reward to any one who can."

Stale Air went to the palace and knocked at the door. When she told the footman her errand, she was taken to the bedroom of the princess immediately. "Ah-ha!" thought Stale Air, as she looked around, "this is just the sort of place I like." Heavy curtains were hung about the bed where the poor little princess lay. Not a window was open! Stale Air sat down on a footstool by the bed.

Just then a little prince came in with a golden ball in his hand. He had been crying. "My father gave me this for my birthday," he said, "but I cannot throw it high in the air, as the village boys do with their ordinary balls."

"I should sell it and buy something that I could play with in the house," replied Stale Air with a wicked laugh.

In the meantime, Fresh Air also set out to seek her fortune.

She soon came to the village where the little princess lived. When she heard about the child's sickness, she went to the palace to offer her services. The king and queen took her to the room where the princess lay, so pale and weak that

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she could hardly move. "And no wonder!" cried Fresh Air, when she saw the heavy curtains and the closed windows. Then she spied Stale Air sitting on a stool at the foot of the bed, sulking as usual.

The first thing Fresh Air did was to run to a window and throw it open. "Mr. Wind," she called, "come quickly!" I came with a rush, and I hustled Stale Air out of that room in a twinkling. Then Fresh Air sat by the bed and fanned the little princess until she sprang up as well as ever.

The little prince came in with his golden ball and was much surprised to see his sister with such rosy cheeks. "I wish some one could help me throw this ball as high as the boys in the village throw theirs," he said.

"Come out of doors, both of you," said Fresh Air, "and I'll teach you." So they all ran out to the palace garden. They stayed there all the afternoon. When it was time to go in for supper, the prince could throw his ball so high that it looked like a golden star. And my, what appetites those children had!

The king and queen were more grateful than tongue can tell. They offered Fresh Air half

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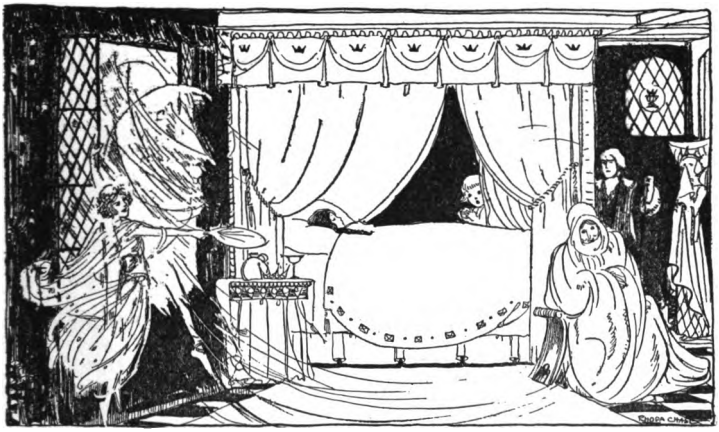
of their kingdom. But she only asked that all the bedroom windows in the palace be kept open at night, and that the prince and princess be allowed to play with her every day in the palace garden. So they all lived happily ever after.



Fairy Fresh Air cures the sick princess.

As for Stale Air, I should like nothing better than to shut her up forever with her stepmother, Shut Windows, in the house at the end of the world.

"And now, children," said Mr. Wind briskly, before Tom and Sally could say a word, "this is the first law. You must remember it always if you wish to be citizens of the Land of Health.

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"I must always breathe fresh air
In rainy weather and in fair."

Mr. Wind then asked Tom and Sally these questions to see if they understood the first law:

1. What is my name when I move air in and out of buildings?
2. Why is air necessary for every one?
3. How does air reach the lungs?
4. What does the air give to the blood that it meets in the lungs?
5. What does the blood give to the air to take out of the body?
6. What is stale air?
7. What does stale air do to the body?
8. What happens to the air on its way through the nose to the throat?
9. Why must you breathe through your nose and not through your mouth?
10. Why was the little princess in the story sick? What did Fresh Air do to make her well?
11. What have you learned about your bedroom windows?
12. Why is it bad for people to sit or sleep in a room that is not well ventilated?
13. I know a little girl named Ellen who once had a hard cold. She decided not to open her bedroom window at night. Why did Ellen feel worse instead of better in the morning?

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## CHAPTER V

## STRAIGHT BODIES AND STRONG MUSCLES

One afternoon in Indian summer Sally and Tom went to the woods to gather nuts. On the way home they sat down in a great heap of warm, dry leaves to count their nuts. "One —two—three—four," counted Sally, as she dropped them from a pile in her lap back into her tin pail.

"Doing sums?" asked a voice politely from the center of a little flurry of leaves. Tom and Sally looked down, but they could see no one at all. "Doing sums?" called a voice from the tree tops.

"I know!" exclaimed Tom, jumping up. "It's Mr. Wind. He has come to teach us the second law."

"I knew you'd guess it," said Mr. Wind, stepping out from behind an oak tree. "We haven't much time either before my Lord the Sun goes down. The second law you must learn is *Hold your bodies straight and exercise your muscles.*" Mr Wind paced back and forth in front of the



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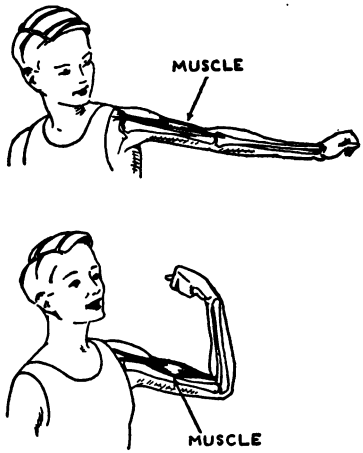
children, blowing leaves from the trees at every word he spoke.

"Dame Nature built your bodies about a framework of bones. This framework is called the skeleton. If you didn't have it, you would be all limp and floppy like the wet clothes I blow about on the clothesline. Just as your body keeps your clothes in shape when you wear them, so the skeleton keeps your body firm and upright.




Muscles move the bones by becoming shorter and then stretching out again. Can you feel the muscles in your arm working?

"Then Dame Nature fastened muscles to the bones. Muscles are like the elastic bands in Tom's sling, only they are alive. They move the bones by becoming shorter and then stretching out again. If you didn't have muscles, you couldn't move at all, unless I blew you about once in a while. The muscles also hold the bones in place."

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Mr. Wind reached his hand into one of the folds of his long purple cloak and brought out two pea pods. "I thought I remembered putting them there last summer for just such an occasion as this," he muttered with a satisfied air.

He broke open the first pod, which was long and slim and straight. Then he showed the children six peas, each touching the other and each one as round and smooth as a pea should be. "That is the way Dame Nature wants peas to grow," said Mr. Wind. "She packs them away nicely in a pod that is just big enough, and that will grow along with them. But look at this," he said, breaking open the other pod, which was twisted and short. Six peas were inside, just as in the first pod. But oh, what funny-looking things they were!

They were all "scrooched" in together, as Sally said, and each pea was dented and wrinkled out of shape. "These two pods are from the same vine," said Mr. Wind. "Dame Nature started them both out properly, but something happened to the twisted pod when it was growing. When growing things are young, they are very easily bent out of shape. I don't know exactly what happened to this pea pod, but it

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grew twisted. And the peas inside were fitted so closely in the pod that they had to be twisted too.

"Now you know that your body is divided into head, trunk, arms, and legs. In the bony framework of the trunk, Dame Nature has packed several very important parts of your body, just as she packed the peas in the pod. When your muscles hold your body straight, there is just room enough for each part to do its work well. But if you let your muscles get lazy and slack, they will be unable to hold the bones in place. And if the bony parts of the trunk are not held in proper position, those important parts of the body that are packed in the framework of the trunk will be crowded together like the peas in the twisted pod. Then they cannot do the work that is necessary to keep the body well. Your whole body will be out of shape too, instead of straight and beautiful, as Dame Nature made it in the first place."

"Oh dear," said Sally, "I wouldn't like that at all, would you, Tom? The twisted pod was so ugly and the straight one so pretty."

"That is another reason for holding the body straight," went on Mr. Wind. "No one likes to see a boy or girl slouching along the street

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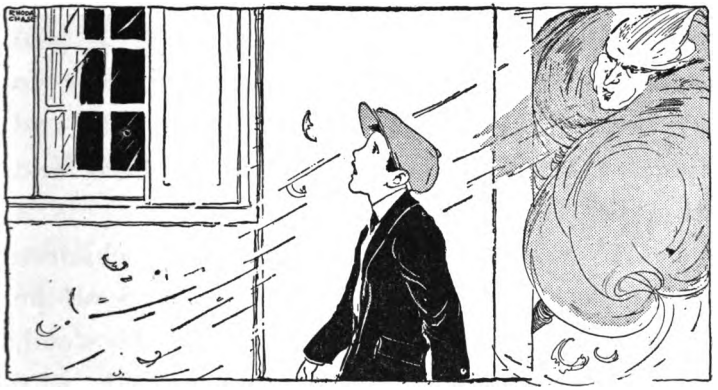
with bent shoulders and dangling arms. I always feel like blowing off their hats to make them run and harden up their muscles. Sometimes I shout: 'Halt! Up with your head and chest! Shoulders



It makes Mr. Wind angry to see anyone slouching along the street.

back! Stomach in! Now then! Left—right—left—right, and mind you walk on the balls of your feet!' But they never understand me," sighed Mr. Wind. "They just say: 'Hear the wind roaring down the street!'"

"Never mind, Mr. Wind," said Sally kindly. "We'll know after this."

"That cheers me up quite a bit," said Mr. Wind, drawing his hand across his eyes. "But Tempest and Teapots! We must get on with the lesson. You have learned that if you didn't

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have muscles, you couldn't move at all. Muscles are very obliging little fellows. They are just what you train them to be. If the days are too short for all the things you want to do, and you play and work with all your might, your muscles become harder and stronger each day. If you move only as much as you have to in order to get about in the world, they become soft and flabby. Training the muscles to be hard and strong is called exercise.

"But what am I thinking of to let you children sit still so long!" he said suddenly, and off he whirled to the meadow at the edge of the wood. He was back in a second, holding carefully in a fold of his cloak two dandelions that had gone to seed.

"I'm going to play a very old game with you," he said. "I used to play it long ago with the maidens of Greece. It is called the torch race. The Greeks loved games, and every four years they used to meet at a place called Olympia to play them with each other. Foot-racing, boxing, wrestling, quoit throwing, and jumping were the things they loved best to do.

"The ancient Greeks had the strongest and most beautiful bodies the world has ever known,

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because they exercised their muscles so often. They knew, too, that there are many muscles in the body, and so they played all sorts of games to give each muscle a chance to become strong. Perhaps you know that great athletic meetings held in different countries for athletes from all over the world are still called Olympic Games in memory of these games of ancient Greece."

My Lord the Sun winked at Sally from behind a low cedar tree. "Oh dear, Mr. Wind," she cried, "it's almost time for the sun to go down. Please won't you teach us the game?"

"Tempest and Teapots! I do talk a great deal," said Mr. Wind smiling. "I notice it more and more as I grow older. Well, each of you must take one of these dandelions that have gone to seed. The Greek maidens carried lighted torches, but they were grown up. Children should never play with fire.

"Each of you put your toes on this line," he went on, blowing a furrow through the leaves. "Now do you see that old beech tree over yonder? We will all three run toward it. You must try to keep me from blowing away all the little winged seeds of the dandelion, just as the Greek maidens tried to keep me from blowing out their torches.

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If all the seeds are gone when we reach the beech, I win. If only one of you has any seeds left, that one wins. If you both have seeds left, the

Tom and Sally hold up their heads and throw their shoulders back as they get ready for the race.

one who gets to the tree first wins. Is that clear?"

"Yes!" shouted Sally and Tom, all ready to start.

"Then off we go!" cried Mr. Wind.

Sally and Tom held their dandelions behind

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their hands, but Mr. Wind managed to blow all the seeds away except three from Sally's dandelion.

"Sally wins!" called Mr. Wind. "Well done, my dear." Both children were laughing and gasping so hard that they could hardly speak. "Now that is the reason why you should always exercise your muscles out of doors," said Mr. Wind.

"What is the reason?" demanded Tom, when he could speak.

"Why, the fact that you and Sally had to breathe so fast after running hard. When your muscles are working hard, they need plenty of fresh air's magic gift of oxygen. And out of doors is where fresh air has her home.

"Speaking of home," he went on, "you and Sally must walk there just as fast as you can. My Lord the Sun is going down, and besides, after exercising so hard, you must keep moving if you stay out of doors. I will walk across the meadow with you as far as the apple tree. As we go along, I will teach you the second law and ask you questions about the lesson. This is the second law that you must learn if you wish to become citizens of the Land of Health:

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"I must hold my body straight,
Bold and fearless, all day long.
I must try, in work and play,
To make my muscles firm and strong."

These are the questions Mr. Wind asked:

1. Of what use is your skeleton?
2. How do your bones move?
3. How are the bones held in place?
4. What are the four main parts of the body?
5. What happens if you let your muscles get lazy?
6. Why must you hold your body straight?
7. What is the correct way to stand?
8. Show me the right way to walk.
9. How can you make your muscles firm and strong?
10. Why did the ancient Greeks have strong, beautiful bodies?
11. Why should you exercise out of doors?
12. What kinds of exercise do you like best?
13. What should you do after exercising hard?
14. Repeat the first and second laws that a citizen of the Land of Health must obey.
15. Richard walks with his head forward and his shoulders bent. He says he wants to be a soldier when he grows up. Richard's uncle took him to see a big military parade. What do you suppose he wanted Richard to notice?
16. Alice and Irene made a daisy chain. Alice sat on the steps and made the chain while Irene ran about in the field and picked the daisies. Which girl was getting the most out of her playtime?

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## CHAPTER VI

## AN UNDERGROUND TREASURE

"I believe it's going to rain to-night," said Tom, opening the window in the playroom to let in some fresh air. "The sky is covered with clouds and I can't see a single star."

"Open the window a little more please," tinkled a voice on the roof. "This is Madame Rain. Dame Nature has sent me to teach you the third lesson." Tom opened the window wide, and patter—patter, Madame Rain slid into the room.

"I think I'll sit on the window sill," she said. "I drip, you know, and your mother might not like that."

Madame Rain was very pretty. She wore a short silvery gray dress, and her arms and feet were bare. On her ankles were wreaths of violets and daffodils. "Now I know why rain always smells like flowers," Sally murmured to herself.

"The third law of the Land of Health," began Madame Rain, "is *Drink plenty of pure water.*" She shook a little shower from her finger tips.



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"When the earth needs water, I bring it down from the clouds. And when the clouds need water, my Lord the Sun draws it up for them. As the earth is covered with almost three times as much water as land, I'm kept fairly busy."

"We know that, Madame Rain," said Sally. "Of course, the earth needs water to fill all the rivers and seas. It's in geography. But why do Tom and I need it?"

"Ever prick your finger?" asked Madame Rain.

"Oh, yes," said Sally. "I did it this morning in school when we were having the sewing lesson."

"And what came out?"

"Blood, of course."

"And what is blood?"

"Why—why," stammered Sally, "it's just blood."

Madame Rain smiled. Then she wrinkled up her forehead. "Blood," she said, as if she were trying very hard to remember, "is mostly water. It's like a little river that flows through every part of the body. However, blood is not the only part of the body that contains water. How much do you weigh, Tom?"

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"Sixty pounds," said Tom promptly. He had just been weighed in school that morning.

"Then about forty-five pounds of you is water," said Madame Rain, laughing at the astonishment on both the children's faces. "The body

Which law of the Land of Health are Tom and Sally obeying in this picture?

is always losing water," she went on. "On a hot day, or when you have been playing very hard, you have noticed, haven't you, that your skin is covered with fine drops of water?"

"Oh, yes," said Tom. "That is perspiration, Mother says."

"Well, your body is always losing water through the skin, even when you can't see it. You lose water through your lungs too. You can see it

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in the air that you breathe out on a cold day. That is always happening, whether you actually see the water or not. Another way you lose water is through the kidneys.

"As the body is made up mostly of water, and as you are losing it all the time, you can see that you need to take in a great deal or you would dry up."

"Like Mother's flowers, when it didn't rain for two weeks last summer," interrupted Sally.

"Just so," nodded Madame Rain. "Flowers and trees, indeed all living things, are mostly water. Human beings have sometimes managed to live without food for a month, but they can't get along without water for more than five days. Some of the foods that you eat contain a great deal of water, but the amount you get in that way is not enough. You should drink at least four glasses of water a day. Now I'm going to tell you a story." And this was the story.

After Water came into being her parents, a powerful king and queen, invited several important people to the christening. Each one gave Water lovely gifts and then told her fortune. Air said she would be very beautiful.

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Earth said she would be beloved. And so it went. But as usually happens on such occasions, one great person had not been invited to the christening He had not been forgotten. In fact, he had been left out for a very good reason. His name was Fire. Fire is a genial, kindly person when kept in his place; but the first time he saw Water, the two began to quarrel and spit at each other. So Fire had not been invited to the party.

At the very last moment, however, he came leaping in, very red and angry indeed. He stood directly over Water's cradle and hissed: "Now *I* will tell your fortune. Forever and ever, you will spend part of your existence in the darkness underground."

Of course, all the guests wept and made a great fuss. They stood there wondering what to say, when Dame Nature came in. She didn't seem at all worried.

In a quiet voice she said: "There is nothing to feel bad about. In fact, it was I who decided that water should spend part of the time underground." She, too, went over and stood by Water's cradle. "You have a great future," she said. "All life everywhere will depend upon

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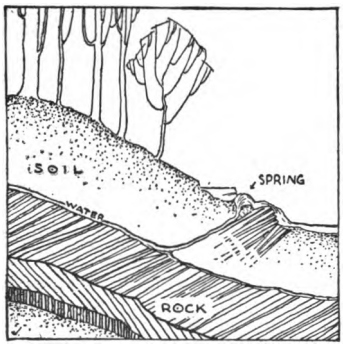
you. On the earth you will fill great hollows and cracks in the ground and be called seas and rivers. You will become part of the bodies of all living things. When men start to build new homes or new cities, when they go out to seek adventure in peace or war, the first thing they will think about is Water. For they cannot live without you.

"When you are brought down from the clouds by Madame Rain, part of you, it is true, will sink into the earth. You will trickle down through sand and gravel until you reach hard rock, and then you will flow slowly along it toward the ocean or the bed of a river or lake. Sometimes you will bubble up through the sand or gravel to make a spring. Or perhaps men will dig down through the earth until they reach the rock over which you flow. Then you will rise up through the hole they have made and be called a well.




This is how Dame Nature makes a spring.

"The part of you that doesn't sink into the

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earth will fall into brooks and lakes and rivers and seas. Ships will sail upon you to distant countries; children will play beside you. It is true that you will be beautiful and beloved.

"You will be taken in great pipes to the cities from lakes and rivers, or from places where you will be especially stored for that purpose. When you reach the cities, you will be carried through smaller pipes into the houses of the people.

"I am sorry to say, however, that you can bring harm to mankind. When you come down from the clouds, you will always be pure and clean. But on the earth there are seeds of sickness, called germs, that live in the waste from the bodies of animals and human beings. Sometimes people are careless and let this waste matter get into the lakes, rivers, wells, or springs from which they drink. The people who drink of you after you have been made unclean in this way are likely to become ill. But there is one way in which they can get rid of these germs."

Dame Nature paused in her talk and looked at Fire. "You meant to be unkind when you foretold that Water should spend part of the time underground. You will be punished by knowing that it is you that will help mankind

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keep Water pure and safe to drink. No germs can live in boiling water, and whenever people are not sure that their drinking water is clean, they will heat it over Fire until it boils. Then they can cool it and it will be perfectly safe to drink."

When Fire heard this, he looked very sulky, and shortly afterward he left the party. All the guests were made happy again by Dame Nature's fortune-telling, and they danced until their slippers hopped into the air. Of course, every word that Dame Nature said came true, as it always does.

"I think I'll get a drink," said Tom suddenly. Madame Rain threw back her head with a little tinkling laugh. "Hurry up then," she said. "It's almost bedtime."

Tom ran out to the well and pumped a pitcher of cool water. After he and Sally had each had a drink, Madame Rain taught them this law about drinking water:

Four glasses full of water
I must drink each day;
If I'm not sure
That it is pure,
I'll boil the germs away.

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When Tom and Sally were snug in their beds, Madame Rain asked them these questions about the lesson:

1. If a boy weighs sixty pounds, about how many pounds are made up of water?

2. In what ways does your body lose water?

3. How can you replace the water that the body loses?

4. I know a little girl who once said she didn't see any use in drinking plain water. What would you say to her? You might begin by asking her if she has noticed how plants look when they are thirsty.

5. Tell the travels of a raindrop from the time it leaves the clouds until it is pumped out of a well.

6. In what ways is water necessary to people when they build houses?

7. How does water reach a house in the city?

8. What does fire do to help us?

9. What do we mean when we say that fire is all right when it is "kept in its place?"

10. What harm does fire do? What is generally the cause of this harm?

11. In what way does water become harmful to human beings?

12. How can you make certain that the water you drink is pure?

13. One day when George and Harry were off fishing, George started to take a drink from the brook. Harry told him not to. What reasons could Harry give for not drinking that water?

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## CHAPTER VII

## KEEPING CLEAN

It was a rainy Saturday, and Sally and Tom were spending the afternoon playing with the toy village. Sally had a dolls' tea set, and she was having a make-believe tea for the farmer's family. "I'm going to ask Mother if I can have a real tea party," she said suddenly.

She ran to find her mother and soon came back with pitchers of hot water and milk, a bowl of sugar, and some small square pieces of bread and butter. She made "cambric tea" in the dolls' teapot with the hot water and milk.

When she was all ready to begin, with the farmer's family sitting in the doll chairs, a little tapping was heard at the window. "Let me in—let me in," tinkled a voice like a silver bell.

"It's Madame Rain," said Sally. "She wants to come to the party."

Tom, who was repainting the red roof of the farmhouse, ran to open the window. Just as he did so, a sunbeam fell through the rain, leaving a long trail of lovely colors behind it. "Oh,



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come and see the rainbow!" he shouted to Sally.

"You might look at me first," said the tinkling voice. "It's not at all polite to forget your guests."

"I'm sorry," apologized Tom, spying Madame Rain on the window sill. "I didn't see you, until now." Indeed, Madame Rain was very tiny. You might almost have put her into a thimble. And she was wearing a different dress. It shimmered and changed colors like the rainbow that still glowed in the sky.

"I thought I'd be a sunshower, while you are having tea," she explained. "It's rather uncomfortable sitting here on the window sill." She slipped across the room and sat on one of the doll cups that Sally turned upside down for her. Then with her feet crossed on the rim of the saucer, she demanded, "All ready for the fourth lesson?" Suddenly she broke off to look at Sally's hands that were busy among the tea things. "I hope," she said severely, "that you and Tom washed your hands before beginning this tea party."

The children blushed. "Well, no, we didn't," replied Tom. "We always do before regular meals, because Mother makes us. But why should we, Madame Rain?"

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"I'll tell you after your hands are clean," said Madame Rain, whose face only dimpled more than ever, when she tried to look stern. "You see," she said, when the children came back with their hands quite clean, "little enemy

This is what Tom and Sally do to keep their body castles clean and neat.

germs that cause sickness are always trying to get into your body. If you touch the food you eat with unclean fingers, these germs may get into your mouth and may make you sick. So, to be citizens of the Land of Health, you must always wash your hands before meals.

"You must never eat fruit or any other foods that come from places where dust and dirt are

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allowed to settle on them, unless you can peel them or wash the dirt off, or cook the food to kill the germs."

"I know," said Sally wisely. "Mother always puts all the food away before she sweeps, and she stopped buying things from Brown's grocery, because he didn't keep his food covered."

Madame Rain nodded. "Your mouth is the easiest way for germs to get into the body, as that is the main entrance. Mr. Wind told you how your nose catches dust particles so that they won't reach the lungs. All the rest of your body is surrounded by a wall that keeps you snug and warm and protects you from harm."

Tom looked surprised. "I don't see any wall," he protested, as he looked down at himself.

Sally clapped her hands. "I guess!" she cried. "It's the skin, isn't it?"

"Right!" said Madame Rain. "Each one of you is a little walking castle. You have two watch towers—"

"Eyes!" exploded Tom.

"And two listening posts."

"Ears!" cried Sally.

"And a gate to the castle which you can open for food to pass through, but which you must

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close at the approach of an enemy. Just inside the gate, which we call the lips, are several little white millstones to grind the food before it goes farther into the castle. In the courtyards, which we call the mouth and nose, are two very keen and alert watchmen, named Taste and Smell, who examine everything that comes in, to see if it should be allowed to enter.

"On the outside wall of the castle, the Touch watchmen are stationed night and day. If the castle is attacked by anything that will cause harm, they sound the alarm by making you feel pain. They know when things are hard or soft, rough or smooth, cold or hot. Indeed, these watchmen tell you a great many things about the outside world that you would never know if they weren't there.

"You must take great care of the watch towers and the listening posts of your body castle. Sight and hearing are two of Dame Nature's most precious gifts. When you read at night, the light should be strong and clear and should come over your left shoulder. Fine print is hard on your eyes, and it is bad for them if you read too long at a time. One more thing to remember is to keep your eyes clean. Never touch them with

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a soiled handkerchief or towel or rub them with dirty fingers.

"You can take care of your ears by avoiding colds and by keeping everything out of them except a clean washcloth every morning. The germs from a cold in the head sometimes run up a little pathway from the throat to the ear. This often causes earache, and deafness might follow. I have known children, too, who became deaf as a result of poking pencils or other things into their ears."

"I had an earache once," said Tom. "My, it was terrible!" He shivered at the thought.

"Well, now you know how to keep from getting another," replied Madame Rain. She smiled at Tom and went on with the lesson. "The wall of your body castle is filled with a great many tiny pipes that have their opening on the outside. Through these pipes some of the waste matter of the body is poured out. Mr. Wind told you that the air takes away waste from the blood in the little rooms called lungs. Another way the blood gets rid of waste is through these pipes in the castle wall. Most of this waste, which we call perspiration, is made up of water.

"On a hot day, or when the body becomes

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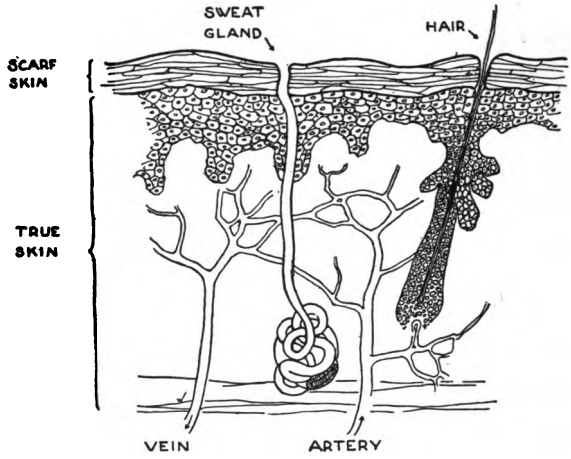
heated by exercise, the pipe openings become wider. Then so much perspiration comes out that you can see it on the outside of the skin. This perspiration bath is one way of cooling the body.




This shows how the waste matter comes out through your skin. What else can you learn from the picture? It gives you some idea of what could be seen in the skin if you looked through a magnifying glass.

On cold days the pipe openings partly close, but the waste is often flowing out, even though you can't see it.

"When the water from perspiration dries up, the waste matter in it is left standing on the skin. Unless this waste matter is washed off, the openings become clogged, and the skin has an un-

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pleasant odor. To keep the skin healthy and clean, you should take a full bath with warm water and soap at least twice a week. As your face and hands are always gathering dirt and dust, they should be washed before every meal. In the morning, if you don't take a full bath, you should bathe face, arms, neck, and chest and rub them dry with a rough towel.

"Finger nails and toe nails are a part of your skin. They should be kept clean and neatly cut. Your hair is the roof of your body castle. Always remember to brush it smooth and wash it at least once a month. Unless you do all this, you will look like an abandoned castle, instead of one whose owner takes great pride in it.

"Sometimes a breach is made in the castle wall; that is, the skin is cut, bruised, or burned. Then the enemy germs go riding through in triumph. But the body is ready for them. In the blood there are special little warriors trained to throw themselves into the breach and fight the germs. You can help these warriors very much if you will get your mother or father to wash the cut and bind it up with clean cloth. Then no more germs can go through, for the chariots in which they ride are dust and dirt.

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"However, the easiest way for the germs to get into the body is through the main entrance, the mouth. It is necessary to keep the inside

What is Sally doing to defeat the enemy germs in this picture?

of the mouth clean, as well as everything that you put into it.

"Within this main entrance to the body are the white millstones that grind the food. These stones are—"

"The teeth!" cried Sally and Tom together.

"Exactly! Dame Nature is generous, for she

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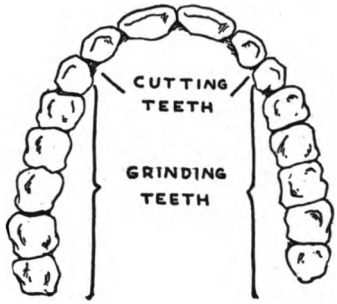
gives you two sets of teeth. The first set began to drop out when you were six years old, and you will have your new set of twenty-eight, when you are twelve. When Dame Nature thinks that you have learned to take care of the twenty-eight, she gives you four more, to make the full set of thirty-two.




Is this a picture of your first set of upper teeth or the second set? How do you know?

"Sally, did you ever watch your mother grind up meat to make sandwiches for your school lunch?"

"Oh, yes," replied Sally.

"What does she do first?"

"She cuts the meat into small pieces with a sharp knife. Then she puts them through the meat chopper."

"That is exactly how the teeth handle the food that goes into your mouth. The sharp front teeth bite off the food, and the flat-topped back ones grind it up. But what happens to the meat chopper after the meat is ground?" asked Madame Rain with twinkling eyes.

"Little pieces of meat are caught in it, so Mother

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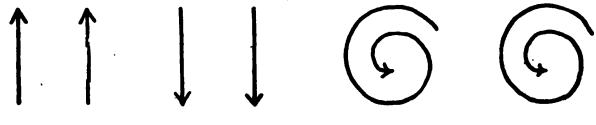
washes it with a brush and puts it back in the closet."

"The same thing happens to your teeth. Little particles of food are caught in the spaces between the teeth after eating. If this food is left there, it decays, and a harmful substance called acid is formed in it. Now the teeth are surrounded by a little white wall, called enamel, to protect the soft inside, just as your body is surrounded by the skin. The acid in the decayed food eats a hole through the enamel wall, and then all sorts of little germs can walk into the tooth. These germs cause toothache, and sometimes they destroy the tooth, so that it has to be pulled out.

"To keep your teeth clean and white and beautiful as Dame Nature meant them to be, you must clean the teeth with a brush after eating, just as Mother washes the meat chopper after using it. If you can't clean the teeth after every meal, they must always be brushed night and morning. Citizens of the Land of Health never forget to do it. Up and down, and round and round like this



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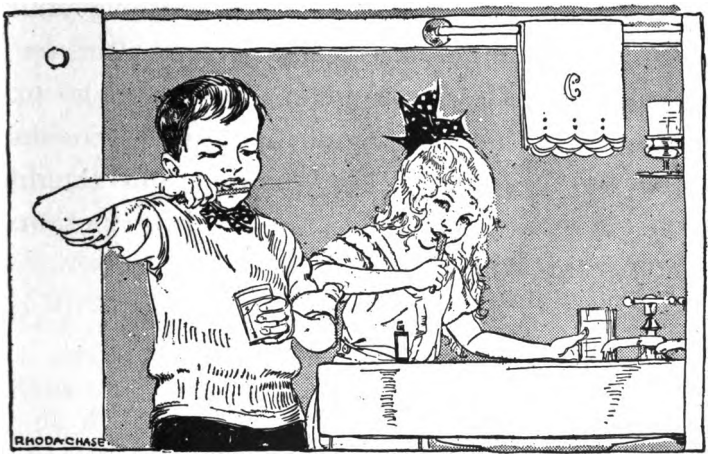
is the best way to get out all the little food particles.

"As it is impossible to keep all germs away from the teeth, you should go to a dentist twice a year. A dentist is a man who has studied about teeth for a long time, and he knows just how to fill up




Can you recite the law of the Land of Health that Tom and Sally are obeying in this picture?

the little holes and drive the germs away from the inside of the tooth."

Madame Rain jumped down from the tea cup. "I see that my Lord the Sun is calling me away," she said. "So you must learn the fourth law of the Land of Health as quickly as possible. This is it:

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"I must give the best of care
To my skin and to my hair;
Twice a week at least, I know
That I must bathe from head to toe."

"There is a special law about brushing the teeth," added Madame Rain. "When you say it, you must make the motions of brushing your teeth with your forefinger. Repeat it after me, please, and both of you make your fingers go up down and round and round as I do." So she stood up in front of the children and taught them this tooth-brushing law and the motions that go with it:

Up and down,
And round and round,
I brush my teeth,
To keep them sound.
To keep them sound
And clean and white,
I brush them morning,
Noon, and night.

When Tom and Sally knew the fourth and fifth laws perfectly, Madame Rain flew to the window. "I'll ask you questions about the lesson on the next rainy day," she said, as she slipped over the sill.

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## Here are the questions Madame Rain asked:

1. Why should you wash your hands before going to the table?

2. Barbara's mother bought some big red apples at the fruit stand on the corner. When she gave the bag to Barbara, she said, "You mustn't eat any until we get home." Why did she say this?

3. What is the main entrance to your body and why must it be guarded?

4. What does the skin do for the body?

5. Tell about the gate and the courtyards of the body castle.

6. Who are the watchmen?

7. What do Taste and Smell do for us?

8. What does Touch do for us?

9. One dark rainy afternoon I looked in at the window of a house not very far away. In front of the fire a boy and girl were reading. The boy said, "We need a light," but his sister said, "Oh, no, we don't. It's only four o'clock." Which one do you think was right? Explain why.

10. What is perspiration?

11. What must you do to take care of your skin?

12. What must you do when the skin is cut or bruised?

13. How do your hair and finger nails show whether you take pride in your body castle?

14. Of what use are your teeth?

15. Why must you clean your teeth?

16. How does the dentist help you in taking care of your teeth?

17. A little girl once said, "The dentist hurts more than a toothache does." Was she right or wrong? Explain your answer.

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## CHAPTER VIII

## WHAT FOODS ARE MADE OF

Sally and Tom sat on the floor in front of the playroom fire roasting chestnuts. It was great fun. Tom put the chestnuts on the fire shovel and held them over the coals. Then pop! they flew out into the room and Sally picked them up. There was one especially large chestnut that took a long time to roast. Suddenly it gave a tremendous pop and flew into Sally's lap. Out of the crack in its side stepped a red-faced little man in a cook's apron, who began dusting himself all over with his cap. "I say," he began, "that was no way to treat a fellow."

"I'm sorry, Sir Food," apologized Tom. "We had no idea you were in that chestnut."

"I wasn't," interrupted Sir Food, "but that's neither here nor there. Dame Nature tells me I am to give you children lessons about food. I can't do it here," he went on, looking about him. "No facilities!"

"Please, Sir Food, what are facilities?" asked Sally.



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"That is neither here nor there," said Sir Food, who didn't know in the least what they were himself. "Whenever I say words that you don't

Sir Food makes a speech about food. Do you know what he is saying?

understand, ask Professor Dictionary about them. And *never* interrupt," he ended severely.

Sally and Tom looked frightened. Sir Food seemed to be a peppery little man.

"There, there," he went on kindly. "I'm hot-tempered, but I don't mean a thing by it, not a thing." He climbed down from Sally's knee and strolled over to the fireplace. Putting his hand deep into his pocket, he pulled out some-

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thing which he threw into the fire. Pop! the grate and the coals flew up the chimney.

There in the same spot appeared a cunning little kitchen. A shiny black cook stove stood against the rear wall, and on either side hung gleaming pans and kettles. A row of bins could be seen against the wall on the right, and on the left wall a sink with bright silver faucets stood next to a closet door. There was a long white table in the center of the room.

"It's the tidiest little kitchen I've ever seen," whispered Sally, almost as if she were afraid to speak for fear it would disappear.

"Well," said Sir Food sharply, "it has to be. Who ever heard of a kitchen in the Land of Health that wasn't clean and tidy?" He began to strut importantly up and down on the hearthstone in front of the kitchen. Then he cleared his throat and began: "Without food, nothing can live. If you forget to put fresh coal on the fire, it goes out. If you give the body no food, it dies. Besides keeping the body alive, food does three things: it gives the body power to move, it keeps it warm, and it makes it grow."

Sir Food stopped striding up and down and mopped his forehead. "That's over," he said

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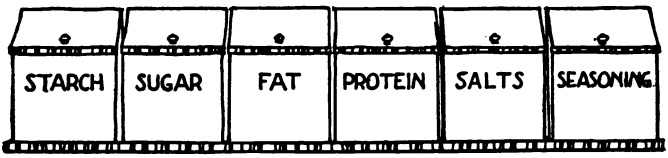
with a sigh of relief. "I always hate making speeches. But what I've told you is very important. Never forget it," he ended, drawing his eyebrows down to make himself look fierce, and not succeeding at all.

"Now I'm going to show you how I make food," he continued, walking over to the bins




Sir Food kept in bins the substances out of which foods are made.

standing against the right wall of the kitchen. "In these bins I keep the substances out of which I make food. In this one," he went on, opening the bin nearest the back wall, "is starch, in the next is sugar, and in the next fat. These three things keep the body warm and give it the power to move. The body burns them up to make heat and moving power, just as the steam engine burns coal to make itself go.

"In this next bin is the substance that makes the living stuff of your body grow. It is called protein. In the fifth bin I keep my salts. There are several different kinds. The one I call lime

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helps build your bones. Without it, your skeleton would be soft and flabby.

"Now in this last bin," went on Sir Food mysteriously, as he lifted the lid, "is my magic seasoning. Without it, people would become sick. Would you like to have me make some foods for you?"

"Oh, yes, please do," begged the children.

Sir Food went over to the sink and washed his hands. Then he dried them on a clean towel. "The very first thing I do when I start to make food is to wash my hands. If you wish to be citizens of the Land of Health, you must see that every one keeps clean who handles the food that you and other people eat. Madame Rain told you why, didn't she?"

The children nodded.

"Very well; now the first food that I'll make for you is milk. Milk is the best food there is for children." Sir Food opened a closet in the left wall and took out several measuring glasses. "I use these because I have to be very careful of the different amounts," he explained. "These glasses are measured off in one hundred equal parts, and each part is numbered from one to one hundred. When the glass is full, I know the food is done.

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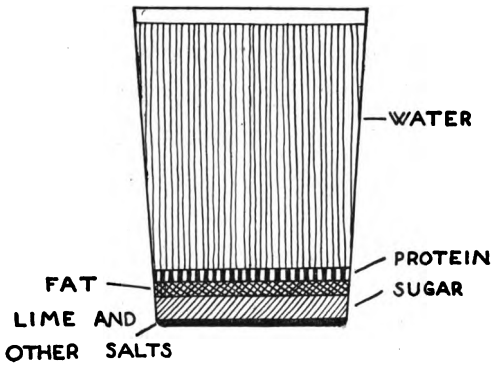
First I'll put water into this glass until it reaches number eighty-seven. Now I put in five parts of sugar, and four parts of fat to keep you warm and active, and a little over three parts of protein




This is what milk is made of.

or growing material; next I add a good pinch of lime and other salts for your bones and teeth. The glass is just about full, but not quite, so I sprinkle in a little magic seasoning. I stir it around and presto! there you have milk.

"You see milk contains a little of everything in just the right amounts to keep you warm, to help you work and play, and to make you grow. The body needs a great deal of water, as Madame Rain told you, and so I put plenty into milk. Indeed, it is the best food in all the wide

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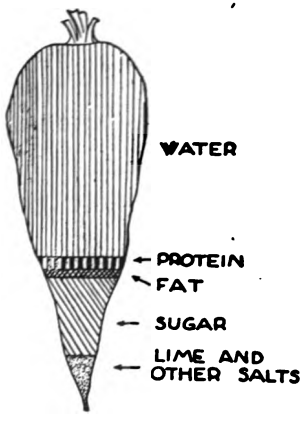
world for boys and girls who want to grow and to work and play hard. So drink at least a pint a day, and more if you can.

"The next food I'll make is oatmeal. Ah, that's a fine food! Just wait and see. First I put in water, and then over sixty-six parts of sugar and starch. Just think how warm that is going to keep you on winter mornings. I put in about seven parts of fat and over sixteen parts of growing material. Then I sprinkle in quite a bit from the bin of salts. There you are!" exclaimed Sir Food, turning out oatmeal into a nice big saucer. "Now put milk and sugar on that, and you couldn't find a better food for breakfast, to keep you healthy and happy all day long.



This is what carrots are made of.

"Now I'll make you a carrot." Sally puckered up her nose. "You don't like carrots, eh? Well, you should. Carrots, indeed almost all vegetables, are good for children, because the magic seasoning and salts in them are especially fine.

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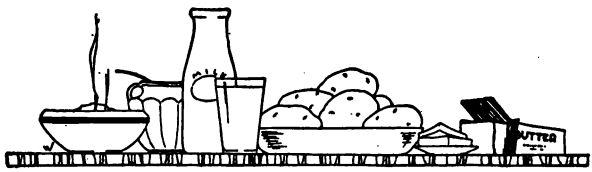
You couldn't possibly get along without them. To make a carrot, I put in water and sugar, and a sprinkling of all the other things. But the quality of the salts and the seasoning is the main thing. Here is a yellow mold. Into it I pour the contents of the glass, and behold! you have a carrot.

"An egg is a very good food too. About three quarters of it is water, and the rest is fat and protein. There is no sugar or starch at all in an egg,"




Are the foods in this picture growing or energy foods?

Sir Food went on. "I make meat in much the same way as eggs.

"Almost all the foods can be divided into two classes. One class contains foods in which there are large amounts of sugar, starch, and fat; they are called *energy foods.* That is, they give the body fuel to burn, so that it can keep warm and have the power to move. The other class contains foods in which there is plenty of protein, and these are called *growing foods.*

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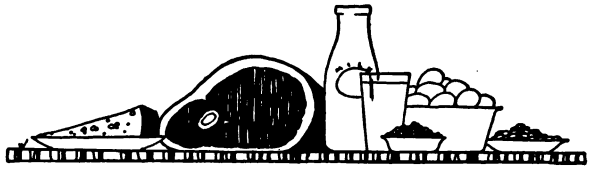
"Sugar, cereals, potatoes, and butter are a few of the energy foods. Some growing foods are cheese, meat, eggs, peas, and beans. Milk is both an energy food and a growing food. You should eat some of each kind of food every day to be healthy and strong."



What do the foods in this picture do for your body?

"It takes a great deal of care and thought to plan meals that will keep your body at its best. I will give you a list of things to eat for breakfast, dinner, and supper for two days, as an example. Here it is:

"1. For breakfast, a dish of hominy with milk, a baked apple, brown bread and butter, and a glass of milk. For dinner, one slice of broiled bacon, poached egg and spinach, fresh green peas or beans, bread and butter, and rice pudding. For supper, cream of tomato soup, a baked potato with plenty of butter, ginger cookies, and a glass of milk.

"2. For breakfast, a dish of oatmeal with milk,

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stewed prunes, bread and butter, and a glass of milk. For dinner, lamb stew with vegetables, a boiled potato, bread and butter, a cup of cocoa (half milk), and custard. For supper, rice and milk, a baked banana, fruit cookies, and bread and butter."

Sir Food took the measuring glasses that he had used in making foods over to the sink and washed them carefully in running hot water. "Always wash in clean hot water the dishes you use in cooking and in eating," he said, "and wipe them on a clean towel. The germs are always trying to get into your mouth, because they can harm you only when they are on the inside. So never forget the rules of cleanliness.

"Attention, please! Now let me see if you can answer a few questions."

These are the questions Sir Food asked:

1. If you had a little house all your own, what would you be most careful about in your kitchen?
2. What does food do for the body?
3. Out of what substances are foods made?
4. Which food substances keep the body warm? Name some things you eat that are in this class of foods.
5. Which food substances give the body the power to move? What have you eaten to-day that is in this class of foods?
6. What food substances make the body grow? Name some growing foods that you like.

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7. Make a rule that should be followed by every person who handles food.

8. Why is milk the best food there is for children?

9. When Frank had dinner with his uncle in a city restaurant, Uncle Fred said he might choose anything he wanted from the menu card. Frank decided to have roast beef, lima beans, peas, and a custard made with eggs. Do you think Frank's choice was wise or foolish? Explain your answer.

10. What would you order if your uncle took you to a restaurant for dinner?

11. Write a list of things that you think would make a good breakfast for a citizen of the Land of Health.

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## CHAPTER IX

## AN ENCHANTED CASTLE

The snow had come at last. For over a week, every time the sky looked gray, Sally and Tom had watched for the first snowflakes; and now they had come, on tiptoe in the night. The whole world was tucked under its white winter blanket by morning. Sally and Tom could hardly wait to be bundled into warm coats and caps so that they could go out to find their playmates and romp in the snow. Fortunately it was Saturday, and they had the whole long day to play.

However, it started to snow hard again in the afternoon, so the children came in to play by the fire. Mother made them take off their wet clothes and put on dry ones. "You see," she explained, "when your clothes are wet, the warmth of your body runs away very quickly, and then you take cold."

When the children were snug and dry by the fire, they heard a funny little crackling noise in the chimney, and Sir Food stepped out on the hearthstone. He seemed pleased to see the chil-



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dren's cheeks so rosy, and their eyes so bright and sparkling. "That's right," he said, rubbing his hands. "The more you play out of doors, the bigger your appetites will be. Be sure

Why are Tom and Sally changing their clothes?

you eat the right foods though!" he ended explosively. Sir Food went off exactly like a firecracker sometimes, but the children had learned that he didn't mean anything by it.

"Please won't you tell us a story?" asked Sally coaxingly. "You never have, you know."

"Well, well," sighed Sir Food, "I suppose

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I must, but it will be about the lesson. That's what I've come for. To-day you must learn the sixth and seventh laws of the Land of Health.

"Once upon a time a beautiful princess lived in an enchanted castle. The enchantment caused the castle to be kept warm inside, to grow larger as the princess grew, and to move about with her. Whenever the princess wanted to go anywhere, she took the castle along. This was a great convenience, as the princess never had to worry about not having a castle to be entertained in. It's not at all worth the trouble of being a princess, I assure you, unless you can count on having a castle.

"Now this princess had a great many servants. One of the most important was the steward. He was given charge of keeping the enchantment working. Ah! ha! You thought enchantments kept right on working without any help, didn't you? But there you are wrong. You have to keep at them night and day. I know!

"In the workrooms of the castle, the steward took the building blocks and the coal that the princess supplied, and with his magic tools he trimmed the building blocks until they were the right shape, and he broke up the coal until it

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was the right size. Then he took them out on a long wharf and dumped them into the castle moat.

"A moat is a ditch containing water around the outside of a castle, but the moat of this castle was on the inside. A little engine kept the water in the moat moving around so that it could carry the building blocks and the coal wherever they were needed."

At this point in the story, Sally looked as if she might burst if she had to keep still any longer. So Sir Food stopped and asked her if she liked it.

"It's really a riddle, isn't it?" demanded Sally, not answering his question. "And we have to guess it. I guess that the castle is the body."

"Right," said Sir Food, "and you are the princess."

"The building blocks and the coal are different kinds of food," cried Tom, not liking to be left out. "But who is the steward, Sir Food?"

"The steward is named Mr. Digestion. When the food comes into the mouth, he takes his first set of tools, the white millstones called teeth, and grinds the food into a soft mass. He mixes it with a juice called saliva, and then he takes

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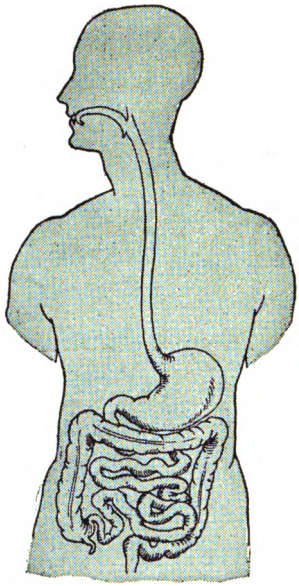
it down a long hall into a workroom named the stomach. There he pours more juices into it and shakes it around until the food is almost ready for use in the body.



This shows the route that food must follow before the blood carries it all over the body.

"Then Mr. Digestion squeezes it out of the stomach through a narrow door to a long wharf. This wharf is the small intestine. A few more juices are mixed in it there, and then it is thrown into the castle moat. Now the castle moat that I've been talking about is made up of the blood vessels of the body. These are the tubes through which the blood flows. The blood carries the food all over the body. It is kept in motion by the little engine pump called the heart.

"From my first lesson, you know that some of the foods make the muscles and bones grow; they are the building blocks. Some feed the fire that keeps the body warm and gives it the power to

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move; they are the coals. That is the way, my dears, that Mr. Digestion keeps the enchantment of the castle working.

"But I haven't finished my story yet, by any means," continued Sir Food. "If you have ever watched masons chipping stone, you know that little pieces fly off that aren't of any use. In coal there are often small pieces of slate or other stones that won't burn. Food also contains some waste matter. So Mr. Digestion hustles the bits of food that can't be used along the wharf and pushes them down a waste pipe, called the large intestine. There they stay until they leave the body altogether.

"We call food that Mr. Digestion doesn't use undigested food. Undigested food in the intestines, or bowels as they are usually called, decays and forms harmful substances. That is the reason why you should get rid of the waste matter every morning. If you don't do this, the blood carries the harmful substances from the decayed food all over the body. Then you feel tired and sleepy in the morning. Your head aches, and sometimes, I regret to say, you are very cross. The harmful substances that cause all this trouble are poisons.

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"Long years ago real princes and princesses used to have pages taste their food before they ate it. This was done because they had many enemies, and sometimes the enemies tried to poison their food. The pages were learning to be knights, and by protecting the lives of their masters they showed their bravery.

"The princes and princesses that live in the castle of the body have pages too. You would never guess who they are. These pages are little pains. You never thought of pains as friends, did you? But just think a minute. If your finger didn't hurt when you put it on a hot stove, you might keep it there until it was badly burned. If the pages didn't give you headaches and stomach aches, you might let the decayed food stay in your body until you became very sick. Indeed, these pages tell you very quickly if there are any poisons in the castle.

"Clean, pure food never brings poisons into the body; and if undigested food doesn't have a chance to decay in the intestines, no poisons are formed. But there are some enemies that make believe they are friendly foods and bring poisons into the body with them. These enemies seem very pleasant at first. They make the body feel

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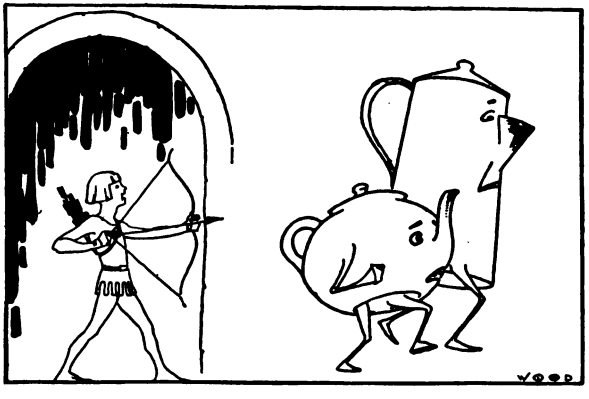
warm and strong for a while, but soon you are told by the pain pages that they are poisons. These enemies are tea, coffee, and alcohol. They are what grown-up people call stimulants.

"Stimulants have the same effect on the body that kerosene has on fire. Kerosene makes the



When you drink tea or coffee, the pain pages tell you they are poisons.

fire very hot for a moment, but it quickly dies down. Sometimes grown-up people use stimulants, like tea or coffee, to make their body fires burn brighter for a little while. But the fires in children's bodies are always bright and never need stimulants. Besides, the poisons in tea and coffee are much more harmful for children than for grown-ups.

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"In drinks that contain alcohol, such as beer and wine, the poisons are stronger than in tea or coffee. They should never be used by children or grown-up people either.

"When children drink tea or coffee, the pages give them all sorts of little aches. Their hearts beat too fast and their hands tremble. Then they can't run races or play games as well as other children. They are often dull at their lessons too.

"Some children pay no attention to the little pain pages, because they like the taste of coffee or tea and the pleasant feeling it gives them for a little while. But pleasures that last for a few minutes aren't worth so much as clear brains and steady hands, are they?

"Citizens of the Land of Health give their bodies clean, pure foods to make them grow and to keep their fires burning steadily and clearly. They never let in the enemies, tea, coffee, and alcohol, who wear smiles on their lips and evil in their hearts.

"It's almost time for you to get ready for supper now, so we will end the lesson by learning the sixth and seventh laws of the Land of Health."

This is the sixth law:

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Every day I must take pride
In cleaning out myself inside.

When Sally and Tom knew the sixth law perfectly, they learned this one:

Coffee, alcohol, and tea,
I know are very bad for me.

These are the questions that Sir Food asked the children about his second lesson:

1. What happens to food in the mouth?
2. What do you think would happen if you swallowed food without giving the teeth a chance to do their work? Do you sometimes do this?
3. After you swallow the food, where does it go?
4. What is done to make this food ready for use in the body?
5. After it is ready for use, how does the food reach the different parts of the body?
6. What is the work of the heart?
7. Can all the food that we eat be used by the body?
8. What does Mr. Digestion do with the material he can't use?
9. Why should waste matter be cleared out of the body each morning?
10. Why are the little pains in the body our good friends?
11. What are some of the food enemies that a citizen of the Land of Health will avoid?
12. What can these enemies do to harm us?
13. Jack and Harold were the fastest runners in the class. Harold began drinking coffee and had a cup of it every morning for breakfast. Which boy do you think won the boys' race at the class picnic in June? Give your reasons.

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## CHAPTER X

## TRAINING MR. TASTER

Sally and Tom were in the kitchen making molasses candy. After it was cooked, Tom set the pans of hot candy in the snow to harden. Then he and Sally scraped out all that was left in the kettle and licked it from their spoons with great enjoyment. When the kettle was quite empty, who should jump out of the bottom and perch himself on the rim but Sir Food!

"Now *that* candy is all right," he approved. "Not a thing in it but pure sugar and butter and molasses. What I object to is this painted candy full of impure, make-believe sugar that children seem so fond of buying. But you mustn't eat too much candy, even if it is pure," he ended, shaking his finger at them.

"We know," said Sally. "Mother won't let us buy any candy at all, but she lets us make it. Then we eat it after meals. She told us to-night just to eat the scrapings out of the kettle."

"That's right," nodded Sir Food.



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"I don't see why," Tom broke in. "I just love candy."

"Well," said Sir Food good-naturedly, "you remember the story of the three little pigs who went out to seek their fortunes. One met a man with a load of straw. He begged for the straw to build himself a house; but when he had the house finished, a wolf came along, and he huffed and he puffed and he blew the straw house down.

"The same thing happened to the next little pig, who built his house of sticks. The last little pig built *his* house of brick, and the wolf couldn't blow it down, no matter how hard he huffed and puffed.

"Now when you eat too many sweets, you lose your appetite for other foods, and then you are like the little pigs who built their houses of straw and sticks. You couldn't build a strong body out of candy and cake and pie, I assure you. But bodies that are built with the help of brown bread and butter and milk and oatmeal can stand the huffing and puffing of any number of enemies."

"I read a story in my fairy book the other day," said Sally, "about a boy and girl named Hansel and Gretel, who were lost in the woods.

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They found a darling little house all built of pieces of candy and cake."

"Who lived in the house?" asked Sir Food with a smile.

"An old witch," replied Sally.

"If any children should try to build their bodies of candy and cake, I'm afraid an old witch named Bad Health would come and live with them. Oh, I know you love sweet things. All children do. And sweets like home-made molasses candy, maple sugar, honey, and dried fruits are good for you, if you eat them only after meals. Of course, citizens of the Land of Health remember not to eat too many sweets, even then. As for eating between meals, Mr. Digestion doesn't like to have you take anything between meals, except a little fruit perhaps or a glass of milk."

"Why not?" asked Tom, whose mother had a hard time breaking him of the habit of nibbling between meals.

"Tom, suppose your father asked you to chop a pile of wood and you worked hard to finish it. Then suppose that, instead of letting you rest after you had chopped up the first pile, he gave you a few more sticks to chop, and then a few

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more. If he kept giving you little piles of wood to chop all day long, with no rests between, wouldn't you get very tired?"

"I should say so!" exclaimed Tom. "It makes me tired just to carry in wood."

Sir Food smiled. "Then you can imagine how Mr. Digestion feels when he sees more food coming into the mouth, after he has worked three or four hours to make the food you ate at breakfast ready for the body to use. It's no wonder he asks the little pain pages to tell you to give him a rest once in a while.

"But Mr. Digestion has other troubles too," went on Sir Food. "I have great admiration for him when I think how well he bears most of them. Take pickles, for instance. Pickles are a great trial to Mr. Digestion because the vinegar in them makes them tough and hard to break up. Then there are doughnuts and fried meat and all other fried foods. Sometimes they settle down in the stomach, and Mr. Digestion can't do a thing with them. Then the little pain pages tell you very plainly that Mr. Digestion doesn't like that kind of food at all.

"He manages sometimes to get such foods into the waste pipe without much trouble; but

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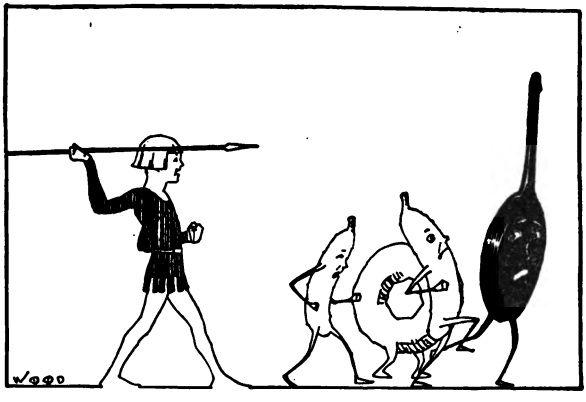
dear me! he isn't very well paid for his work. If you eat sweets, pickles, soda water, and fried foods, instead of fruit, vegetables, milk, and eggs, Mr. Digestion isn't able to give the body



The pain pages tell you when Mr. Digestion doesn't like the food you give him.

the building material and fuel it needs to grow straight and strong. So remember that citizens of the Land of Health always give Mr. Digestion the right kind of foods.

"After all, it's just a matter of training Mr. Taster. He lives in your tongue, and he likes whatever he's used to. People in the South Sea Islands eat raw fish and like it, because they're accustomed to it. Little Eskimo children would probably rather have a drink of castor oil than a

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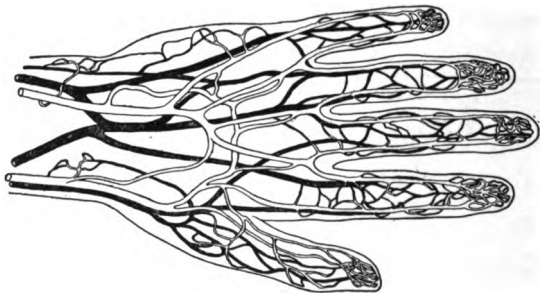
glass of soda water. In India people like much more pepper in their food than you do, because their taste has been trained to like it, and yours hasn't.

"In every country in the world, the people like to eat the things they're used to eating. So train



The blood flows through the body in tubes called blood vessels. Here is a picture of the blood vessels of the hand.

Mr. Taster by eating the foods that you know are good for your body, whether you like them at first or not. Soon you will find that Mr. Taster likes milk much better than soda water. A slice of brown bread spread thick with fresh yellow butter will taste sweeter than frosted cake. Try it and see!

"Now I will tell you one more way that you can help Mr. Digestion. You know that the blood is the transportation system of the body.

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That is, it carries fuel and building material and oxygen to the parts of the body that need them, and carries away waste. When any part of the body is working, that part needs the blood more than the other parts, because it uses up the various materials faster and gives off more waste.

"Your muscles need a great deal of blood when you are exercising them. When Mr. Digestion is working, he needs extra blood too. So if you exercise your muscles directly after a meal, you will take away the blood from Mr. Digestion just when he needs it most. Then he will have to work more slowly, or not at all, until the muscles are through with their blood. Sometimes you study hard after eating, and then your brain needs blood; or you take a hot bath, and all the blood rushes to the skin. The best plan is to play quiet games or rest for half an hour after eating and let Mr. Digestion have enough blood to start his work.

"I'm going to end my last lesson by telling you a pretty story that the god Mercury told me long ago. One day he and Jupiter, the king of the gods, went walking on the earth. They came at evening to a humble cottage where an old couple named Baucis and Philemon lived.

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Baucis and Philemon were very poor, but they never hesitated to share their simple food with any stranger who asked their hospitality.

"'We were tired and footsore,' said Mercury, 'and so we begged shelter and food of the good old people. They had just had their own supper and they were very much ashamed of the fare they set before us. When we sat down to eat, we found an earthen pitcher filled with milk, two eggs baked in the hot ashes, half a loaf of brown bread, a little honey, and two bunches of grapes. Not much, to be sure; but at my first bite of bread and honey, I thought I was back on Mount Olympus. It tasted even sweeter than ambrosia, the food of the gods. What is more, the milk pitcher never seemed to be empty, no matter how many bowls we filled from it. I looked at Jupiter, and he smiled gravely, but he didn't say a word.

"'Later, when we were alone, I asked him if he had changed the food to nectar and ambrosia. He shook his head. "Simple food, served with loving-kindness and eaten in peace and contentment tastes sweeter than all the nectar and ambrosia on Mount Olympus," he answered. "As for the milk pitcher, I thought it was about time

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that mortals learned the wonder of milk, so I decreed that at least one pitcher containing it should never be empty."'

"And that," said Sir Food, "is the true story of the miraculous pitcher. I wish that every boy and girl in the world had one now. It's time for you to go to bed, but it won't take long to teach you the eighth law of the Land of Health. This is it:

"The proper foods for me to eat
Are simple ones and clean.
A pint of milk each day I need,
And vegetables green.
The time to eat is during meals,
And never in between."

These are the questions that Sir Food asked:

1. Make a list of the things you have eaten in the last day or two. Are you building your house of straw and sticks or of bricks?

2. Charles spends every penny he can get for candy. His mother wonders why he is never hungry at mealtimes. Do you know why?

3. Dorothy's aunt says that she almost dreads to have a visit from Dorothy because it is so hard to cook for her. Dorothy says she does not like eggs, milk, carrots, lettuce, or spinach. What ought Dorothy to do? Why?

4. What happens when you eat too many sweets?

5. Why shouldn't you eat between meals?

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6. Name some foods that you had better not eat and tell why.

7. What foods are good for you?

8. How can you train your taste so that you will like good foods?

9. Do you remember how uncomfortable you felt all last Tuesday afternoon? Perhaps you will think of the reason when you remember that you ran all the way back to school after hurrying through your luncheon. What was Mr. Digestion trying to tell you?

10. What can you do to help the body digest the food you give it?

11. Tell the story of the miraculous pitcher.

12. What do you think of this as a motto for a home in the Land of Health?

*Simple food, served with loving-kindness and eaten in peace and contentment tastes the sweetest.*

What can you do to live up to this motto?

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## CHAPTER XI

## STORED SUNLIGHT

Sally had six narcissus bulbs growing in a bowl of pebbles. Mother had told her to keep the bowl on a low table by the window in the playroom so that it could have plenty of sunlight. The green leaves and flower stalks grew very quickly. One afternoon when Sally and Tom went into the playroom to put fresh water into the bowl, they found that one of the flower buds had opened. As Sally leaned over to smell it, a ray of light slid in through the window and landed bump against the opposite wall.

The children thought something had fallen from the table. But when they turned to look, to their astonishment they saw a tall fellow dressed in green sitting on the floor with his back against the wall and his legs crossed in front of him.

"My Lord the Sun's compliments," he said smiling, as he saw the surprise on the children's faces. "He is sorry that he cannot come in person to give you the lessons on sunlight, but he finds himself unable to leave the sky just now. In



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fact, he doesn't quite know what would happen if he did. However, it doesn't matter.

"I am one of my Lord's courtiers. There are six of us, and our names are Red, Orange, Yellow, Green, Blue, and Violet. I am Green. You needn't stand," he added kindly. "Just sit down anywhere." He waved his hand with a lordly air. After the children were seated, he began:

"My Lord the Sun is a most important person. He gives the earth so many blessings that in the old days, before people knew any better, he was worshipped as a god. The Greeks called him Apollo and thought that he drove the chariot of the sun across the heavens from east to west every day. That mistake used to make my Lord the Sun very angry. He is much better pleased now, for although men no longer worship him, they know how great he really is. Even children like you know that the earth moves around my Lord the Sun.

"He gives three gifts to the earth: light, heat, and energy. Without them, nothing could live. Have you noticed, Sally, that the narcissus plants always lean toward the light that comes in through the window?"

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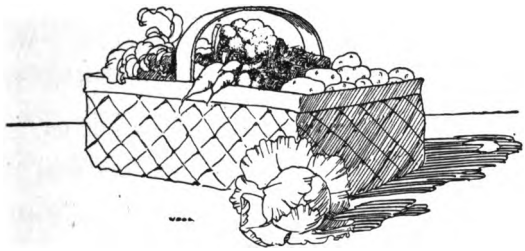
"Oh, yes," said Sally. "No matter how often I turn them around, they always look as if they were bending forward on tiptoe to see something that is going on out of doors."

"All plants and trees and flowers turn toward my Lord the Sun, because he gives them life,"



Stored sunlight

explained Green. "In their leaves are little green cells that soak up sunlight as a sponge soaks up water. This sunlight gives the plants energy to live and grow. If you should put a plant in a dark closet and left the door open a crack, the plant would send out a long stem until it reached the light coming through the crack. That shows how important sunlight is to the life of plants. It is pleasant to think, isn't it, that whenever you eat vegetable foods like lettuce and spinach, you are eating stored sunlight?

"Plants are the only living things that can take

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the gift of sunlight energy directly from my Lord the Sun. All other living things must get it from plants or from animals that eat plants. It is this sunlight that gives you the power to live and grow and move about. Without the energy from my Lord the Sun, no living thing would be on the earth.

"My Lord the Sun loves the earth," went on Green, "but there are some things on it that he hates. These are the germs of sickness. Whenever he sees one, he kills it with his hot arrows. But sometimes people won't let the sun shine into all the corners of their houses. Then the germs hide with dust and dirt in the dark.

"In cities, great buildings that hold hundreds of families sometimes stand so close together that no light can get into many of the rooms. Then my Lord the Sun can't reach the germs of sickness with his arrows. In most cities now, men are forbidden by law to build tenements so close together that some rooms must always be without sunlight and fresh air. Citizens of the Land of Health who live in cities must see that those laws are kept."

Green looked up at the window suddenly. "My Lord the Sun is calling me!" he exclaimed.

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"You must learn quickly what he does to the germs."

Tom and Sally soon knew this rime by heart:

If you want the germs to run,
Let them see my Lord the Sun!

As Green was leaping over the window sill, he called back, "My Lord the Sun will ask you the questions on the lesson to-morrow morning when you are walking to school."

These were the questions he asked:

1. How do growing plants show that they want sunlight?
2. What are the three gifts that the sun gives the earth?
3. How do we get sunlight energy through plants?
4. What things on earth does the sun hate?
5. Why is it important to let the sunlight into our houses?
6. Do you know any dark corners indoors where enemy germs can hide?
7. Some children wanted to play in an old deserted house. The windows had been boarded up, and the house smelled damp and musty. Why was the children's mother afraid to have them play there?

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## CHAPTER XII

## CLOTHES AND THE WEATHER

It was the first night that Sally and Tom were to sleep on their new sleeping porch. Father had built it for them so that they could have plenty of fresh air. Mother bundled them into their warm woolly suits and caps, tucked them into their beds, and kissed them good-night. "Go right to sleep now, children," she called as she went down the stairs.

But they didn't go to sleep. Oh, no! for who should come blowing up but Mr. Wind! "I'm glad you have warm night clothes on," he said, "for my Lord the Sun has asked me to take you on a journey. Hop in here," he said to Sally, holding open a big pocket in the left side of his cloak. Sally hopped in. She was very much excited at the thought of going on a journey. Tom jumped into the right cloak pocket and whe-e-e-e, off they flew.

The earth below in the moonlight looked very far away. "Just like the toy village," thought Sally. And the stars in the Milky Way were as



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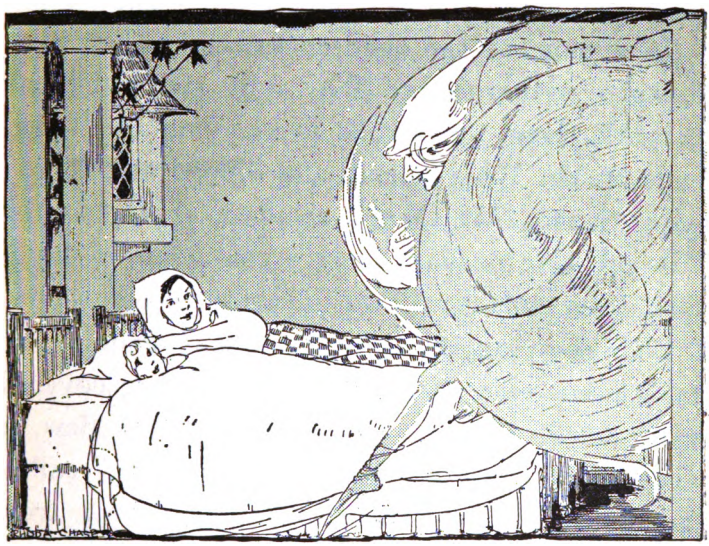
large as cobblestones, only of course much more beautiful.

As they flew along, the sky grew lighter and lighter, and then quite suddenly my Lord the



Mr. Wind comes to take Tom and Sally on a journey.

Sun poked his head up over a hill and laughed at them. "I hope you have a pleasant journey," he called. "Here's your guide," and that same moment a tall man dressed in a lovely shade of yellow landed on Mr. Wind's back. "I'm Yellow," he said.

Mr. Wind drew in a big breath of air and made

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himself so big that the ends of his cloak covered half the sky. "That's better," the children heard him say. "Now then, Yellow, where do you want to go first?"

"South America," said Yellow.

In a moment the children saw that they were flying over the ocean. Tiny ships steamed along beneath them. Sea gulls perched on the flying ends of Mr. Wind's cloak and dipped and soared with them. Mr. Wind shouted at the birds: "Be off, I'm too busy to give you a ride to-day." So the sea gulls flew down to ride the ocean waves.

Soon they were flying over the land again. The trees grew very close together and were covered with vines. Strange bright-colored birds flew in and out of the branches. "Here we are," called Yellow suddenly. "Light on that rubber tree, Mr. Wind."

Mr. Wind made himself small and flew down to the top-most branch of the tree. In a little clearing near a river Tom and Sally saw a cluster of huts made of poles and palm leaves. Several little brown children, with no clothes on at all, sat on the ground playing with some sticks. A man wearing a single piece of cloth was fishing from the bank of the river. Two women, with

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skirts woven from the bark of palm trees, seemed to be roasting meat on the coals of a little fire.

"You see," said Yellow, "my Lord the Sun sends his rays straight down here all the year round, and so the weather is always hot. This part of the earth is in the torrid or hot zone. Natives of this zone wear little clothing, because they do not need it to keep warm and their skins are used to the hot sun rays. People who come here from other lands wear very light, loose clothing to protect their skins from the heat."

Tom and Sally began to feel very warm indeed in their woolly suits. "If you stayed here long," said Yellow, "you would have to wear clothes made of white cotton, and they would need to be very loose so that the air could reach your skin and keep it as cool as possible. But now we must go to another country. Greenland, please, Mr. Wind."

With a rush Mr. Wind bounded out of the tree and up into the sky. Soon they were flying over the ocean once more. Mr. Wind headed north, and it grew colder and colder. Icebergs dotted the ocean, glinting and sparkling in the sunlight. It became very dark, but the whole sky seemed to glow with lovely colors. Sky rockets of light

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shot up from the north and broke in showers of crimson and yellow at the top of the sky. "Northern lights," said Yellow briefly at the children's little "oh" of astonishment. "Here we are," he cried at last.

Mr. Wind lighted on a snow mountain and danced up and down to keep warm. Not a person was in sight. A few round mounds of ice were huddled together at the foot of the mountain. "Look!" said Yellow suddenly, pointing to a man crawling out of one of the mounds. He was dressed in furs from head to foot and a fur hood was drawn close about his face. He threw a few chunks of frozen meat to five or six dogs snapping about his feet. Then he crawled back into the mound. "That was an Eskimo," said Yellow.

"My Lord the Sun shines here for only part of the year, and then his rays strike the earth in such a way that they don't give much heat. So it is always cold. This part of the country lies in the frigid zone. The Eskimos have to wear the thick fur of animals to keep warm, and when my Lord the Sun is gone, they stay close in their caves of ice and snow. They burn the fat of animals in stone lamps, but they depend mostly on their fur clothing for warmth."

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"Goodness!" said Tom shivering, "I wish I had a fur coat."

"So do I," cried Sally. "Let's hurry away, Mr. Wind, I'm cold."

"Off we go then," said Mr. Wind; and as they flew along, Yellow started the lesson. "You

In the summer, citizens of the Land of Health wear light cotton clothes.

Out of doors in the winter, they wear warm clothing from head to toe.

children live in the temperate zone, where my Lord the Sun arranges matters so that you have both winter and summer. But the summers are never so hot as the weather in the torrid zone, and the winters are never so cold as weather in the frigid zone. You wear one kind of clothes

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in summer and another kind in winter, to be comfortable and well.

"In the summer you should wear light cotton clothes. In cold weather, when you go out of doors, you should have coats made of wool or fur to keep you warm. If there is snow on the ground, you wear rubbers to keep out the wet. Heavy shoes and stockings keep your legs and feet warm. It is silly for people to wrap up in wool or fur and at the same time wear silk stockings and thin low shoes. The body should be kept warm all over, for when it becomes chilled, the little cold germs are likely to make you ill.

"When you come into the house in winter, you should take off your heavy outdoor clothing, as it is just as bad for you to be too hot as too cold. The raincoat and rubbers that you wear on a rainy day should always come off when you go inside."

"It's my turn now, Yellow," said Mr. Wind, turning his head. "We're almost home, and I have a few things I'd like to tell these young people. Yellow is quite right about the rubbers and raincoat," he went on to the children. "Your body must be protected against damp and cold. But if the skin is completely shut off from the

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fresh air, you feel very uncomfortable, and your skin gets so hot that when the heavy clothes are taken off you are likely to catch cold. Most cloth is full of tiny holes, so that I can move the air

When these children go into the house, what should they do?

in to your skin and out again. But rubber has no little holes in it to let the fresh air through. So always take rubber things off in the house.

"Your clothes should always be loose. You can't run and play games out of doors half so well if you are bothered with tight clothes. If you are to be healthy and strong, your blood must run freely through the body and never be

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held up at the toll gates named Tight Waistband, Tight Collar, Tight Shoes, and Round Garters. When you take deep breaths after running hard, it isn't very pleasant to be afraid that all your buttons may fly off at any moment."

Sally giggled. "That's how I felt when I wore my last year's serge dress for the first time this winter," she said. "Mother had to rip it all out and make it over again."

Mr. Wind smiled. "Madame Rain told you," he went on, "that perspiration is always coming out of the body through the skin. Most of this perspiration is soaked up by your clothes. It has an unpleasant odor, and so the clothes next to your skin—that is, your underclothes—should be washed very often to keep them fresh and clean.

"Your outside clothes are always picking up dirt and dust. Dirty clothes are not only unpleasant to look at, but the little germ enemies love to hide in them. Summer clothes should be kept dainty and clean by frequent washing, and winter clothes should be brushed and aired often. Citizens of the Land of Health always fold up their underclothes at night and hang up their suits and dresses to keep them neat and tidy."

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"I'll have to leave you here," said Yellow, interrupting Mr. Wind, "but I have just time enough to teach you the tenth law of the Land of Health. Here it is:

"Wool or cotton, fur or leather,
Proper clothing suits the weather;
Loose it is from neck to feet,
And always tidy, clean, and sweet."

Yellow flew back to the court of my Lord the Sun, and Mr. Wind brought the children safely to their beds on the sleeping porch. Then perching on the railing that ran around it, he asked the children the following questions:

1. Why is it a good plan to sleep on a sleeping porch?
2. Tell something about the way people live in South America.
3. Tell something that you might see on a trip to Greenland.
4. What kind of clothes should you wear in warm weather?
5. What kind of clothes should you wear in cold weather?
6. Jean's class is going to give a Christmas play. Jean is to be a fairy. She is going to wear a white dress, white slippers, and thin silk stockings. The schoolroom will be well heated. What must Jean be careful about when she goes home?
7. In what ways can you keep your body from becoming chilled out of doors, and too hot indoors?
8. Why should you take rubber things off in the house?
9. Susan can't understand why she has so many colds.

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Yesterday I heard her say, "I always wear my rubbers in school because I'm afraid I'll forget them if I take them off." Do you know why Susan has a cold so often?

10. Why should you wear loose clothes?

11. Describe two kinds of shoes and tell which would be worn by a citizen of the Land of Health.

12. What care should you take of your clothes?

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## CHAPTER XIII

## IN THE GARDEN OF SLEEP

Sally was having a beautiful dream. She thought that her bed had been changed into a little boat and she was sailing in it through the sky. The stars looked like yellow water lilies, and she was just reaching out to pull one up by the roots when a low voice murmured in her ear, "Wake up!"

A lady in a soft gray dress spangled with crescent moons was sitting on one side of her bed and Tom on the other. The bed was dipping up and down in the strangest fashion. "It's quite all right," said Lady Sleep, "I'm taking you to my garden."

"Then it's true!" gasped Sally.

"What is true?" asked Lady Sleep with a puzzled frown.

"Why, that my bed is a boat."

"Of course," replied Lady Sleep. "Every one knows that."

The bed dipped suddenly toward the earth. It floated past open windows, where Tom and



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Sally saw rosy-cheeked children sleeping happily. Through closed windows the pale faces of other children were dimly seen. They peeped in at warm kitchens, where cats were curled up in little baskets. The boughs of cedar and spruce trees made green tents, where sparrows and chickadees slept in the warmth of fluffed-up feathers. In the chicken houses fat hens were perched comfortably with their heads tucked under their wings. The whole world was fast asleep.

"Here we are!" cried Lady Sleep suddenly. The children saw a high wall ahead of them with a white gate in the center. Lady Sleep whistled a sleepy bird's note, and the gate opened wide enough to let the bed pass through. They floated down a long aisle with trees on either side. Stars hung from the branches in clusters like wisteria blossoms. A still deep river encircled the garden.

The bed settled down under a live oak tree. "Aren't there any people here?" asked Sally in a disappointed voice.

"Hush," whispered Lady Sleep. "The thoughts of every sleeping person in the world are always here. But they are invisible. Even I can't see them. When people's thoughts are in the Garden of Sleep, their bodies rest.

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"Thoughts are active little fellows. They have to be amused most of the time, and so I give them dreams to play with. Dreams are like picture puzzles. They are made of little pieces of memories. When you go to bed with happy thoughts in your mind, you usually have pleasant dreams. When you have cross thoughts, you sometimes wake in the morning and say you have had bad dreams.

"While your thoughts are in the Garden of Sleep, your body has a chance to rest. Your tired muscles and nerves are mended after the long day's work. The nerves perform the messenger service of the body. They carry the messages sent out by the brain, which is the captain of the body. He tells the other parts what to do. As he is always sending messages when you are awake, the nerves are tired by night. It is very important that your brain and nerves and muscles should stop working for rest and repairs.

"Children between the ages of eight and ten years need from ten to eleven hours of sleep every night, with the windows wide open.

"I know a great many children who don't like to go to bed. They beg to sit up for just a few minutes more to finish a story or game. Some-

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times they go to the movies. And yet I have heard those same children wish they could have an adventure. They would like a tight little ship, for instance, in which to hunt for buried treasure.

"My dears, sleep is a wonderful adventure. You go to bed, and away your thoughts sail to the Garden of Sleep. No one in the whole wide world knows where that Garden is. And yet the guide map, with a cross above the Garden, is locked in your mind. The closing of your eyes turns the key, and in the next breath your thoughts are off to find dream treasures.

"People who go on adventures make ready beforehand. There are several things that you must do before your thoughts can sail away to the Garden of Sleep. In the first place, you should eat a light supper. If you eat a heavy meal at night, Mr. Digestion needs so much help from the muscles and blood that the brain is kept awake sending messages to them.

"Cereals, stewed fruit, milk, brown bread, and butter are good things to eat for supper. Tea and coffee don't like to have you go on adventures. If you drink them, they are sure to keep you awake.

"You should read or play quiet games just

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before bedtime. When you are running very fast, you have to slow down before you can stop, don't you? All the parts of your body must slow down before you can go to sleep. If you don't let them do it before you get into bed, they will have to do it afterward. And then you wonder why you don't go to sleep right away. To send your thoughts happily on their adventure, you must be ready for sleep when you hop into bed.

"You remember that your body mends itself and grows while you are asleep. To do that, it must be comfortable. The bedclothes should always be clean and sweet. A low pillow or none at all, light warm blankets, and a mattress that is smooth and not too soft are what the body likes best. All the very nicest adventures begin in the dark. No lights should be in the harbor of your room. Your thoughts set their course by the moon and the stars."

"Do the thoughts of flowers come to the Garden of Sleep too?" asked Sally.

"No," said Lady Sleep. "There's a story about that. Dame Nature had such lovely dreams at the very beginning of the world that she wanted other people to enjoy them too. She thought of a

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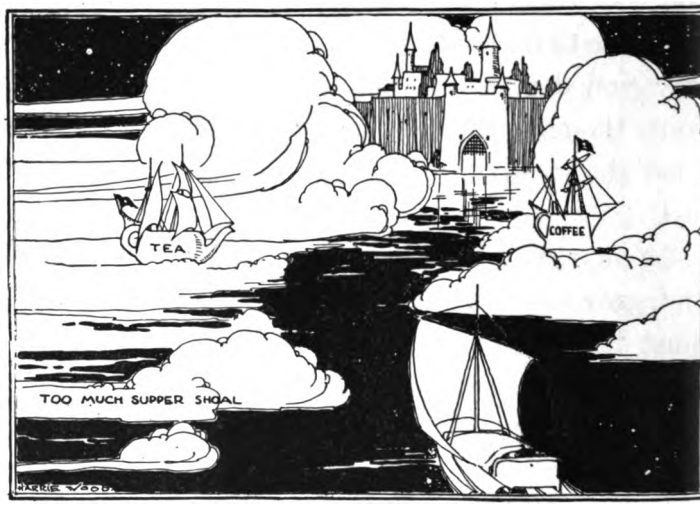
fine plan. She decided to make her dreams come true.

"She tucked them safely in little brown seeds and bulbs. Then she put them to bed in the warm




The adventurous course to the Garden of Sleep.

dark earth and covered them with a blanket of leaves. In the spring the dreams heard Dame Nature calling them, through the warmth of my Lord the Sun and the touch of Madame Rain. They poked their pretty faces up through the earth, and people called them flowers.

"The flowers are Dame Nature's dreams come true. As Dame Nature rests by going to sleep,

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just as you do, she always has plenty of dreams to make into flowers.

"The best part of an adventure is coming home again. So in the morning your thoughts come sailing back. Then you wake up; and your treasure hunt was successful, for you found rest for your body and happiness for your mind. These are two of the greatest treasures in the world.

"But remember, to find the treasures, you steer clear of the pirate ships, Tea and Coffee. You are careful not to stir up the unfavorable wind, Excitement before Bedtime, and you mustn't run aground on Too Much Supper Shoal.

"It's time we were going home now. You mustn't tell any one that you were awake in the Garden of Sleep. It's a great secret, and besides, no one would believe you."

The bed floated out from under the live oak tree and sailed through the white gate. As they went along home, Lady Sleep taught them the eleventh law and asked the questions about the lesson.

This is the law:

To keep my body at its best,
Eleven hours I must rest.
At eight to bed and up at seven
Will surely count up to eleven.

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These are the questions:

1. What happens to your body when you are asleep?

2. How many hours of sleep do you need?

3. Howard goes to bed at eight o'clock every night. James takes a book to bed with him and reads until ten. Which boy do you think does better work in school? Why?

4. What messages are carried by your nerves?

5. Why would children who sleep in rooms with closed windows have pale faces?

6. How should you steer your boat in order to have a pleasant voyage to the Garden of Sleep?

7. Sometimes when Philip and Rose have an early supper, their mother lets them have something to eat before they go to bed. The other night Rose drank a glass of milk and Philip ate a large piece of apple pie. Which do you think had a better sleep that night?

8. How do you make ready for a good night's sleep?

9. Describe the room and the bed in which your body would be most comfortable during sleep.

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## CHAPTER XIV

## ENEMIES OF THE LAND OF HEALTH

Tom and Sally had colds and Mother had kept them home from school. She explained that she didn't want them to give their colds to the other children. "I don't see how I could give away a cold," grumbled Tom, kicking his heels against the chair he was sitting in.

Sally looked up from dusting her farmhouse and the farmer's wife and baby. "I don't either," she sighed. "I hate colds. They make me feel so stuffy." She sneezed violently.

"Oh dear! Oh dear!" cried a tiny voice. "Please don't sneeze right in the baby's face. He'll catch your cold." Sally almost dropped the farmer's wife in her astonishment.

"She's quite right," said another voice from the window seat. "Put her back on the farmhouse porch, Sally."

Tom and Sally turned to look at the speaker. He was a tall fellow with wings on his cap and heels and a queer-looking staff in his hand. "I'm Mercury," he said with a smile. "You have



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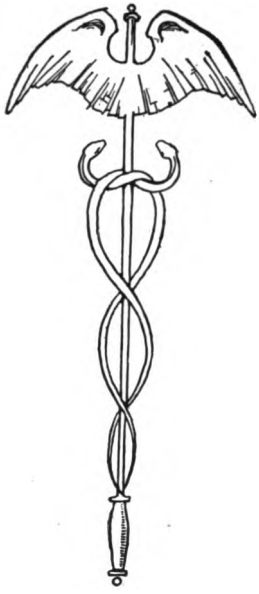
heard about me, haven't you? Dame Nature has sent me to guide you through the country of the enemy. It's just over the border of the Land of Health."



Mercury's staff.

"May we look at your staff?" asked Tom politely.

"Certainly," replied Mercury. He held it up for the children to look at. Two snakes were twined about it, and at the top fluttered a pair of wings. "It's called a caduceus," explained Mercury, "and it is used as the emblem of the medical service of the United States Army. But dear me, we can talk on the way," he broke off. "We have a long journey before us."

He whipped off his cap, and holding it close to the floor, told the children to hop in. There was just room enough inside for Tom and Sally to sit close together. When they were safely aboard, the wings on each side of the cap lifted it slowly into the air, and the children found themselves over Happy Village, with Mercury flying beside them.

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As they soared still higher, the Land of Health appeared spread out beneath them like a schoolroom map. "We are coming to the border now," whispered Mercury.

The children saw a high wall ahead of them. "Why, it looks as if it were made of window screens," remarked Sally.

"So it is!" replied Mercury. "We'll land on top of it, because from it we can look over the country of the enemy."

The broad top of the wall was astir with activity. Tom and Sally saw Yellow sitting a little way off shooting sun arrows into a knot of dark flying things in the enemy country. He waved his hand at them. "I'm having lots of fun!" he called.

"What are you doing?" Tom shouted back.

"Shooting cold germs. Come on over."

Tom and Sally ran over to watch Yellow, who was just aiming at another germ. "Ping!" sang the arrow as it left the bow. It hit one of the little fluttering things so that it curled up and fell to the ground. "Sit down," invited Yellow, moving over.

"We can't," replied Sally politely. "Mercury is going to show us over the enemy country."

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Just then Mercury strolled over with his hands in his pockets. "Hello, old fellow," he cried, slapping Yellow on the back. "Any luck?"

"Fine!" replied Yellow. "Shooting colds is great sport."

"I didn't know a cold was anything you could see to shoot at," remarked Sally. "I thought it was something you had inside you that made you sick."

Citizens of the Land of Health catch their sneezes in a clean handkerchief.

"It is," replied Yellow. "But colds aren't always inside you. They come in from outside. Sicknesses like colds, measles, scarlet fever, diphtheria, and whooping cough are caused by little living things, called germs, that travel from one person to another.

"If a person with a cold sneezes or coughs, he sprays the air with these little living things. People who are near him breathe in the air full of the cold germs, and then they are likely to have colds too.

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That is why your mother didn't want you children to go to school to-day. It is also why the farmer's wife felt so badly when you sneezed in the baby's face, Sally. You must always catch your sneezes and coughs in a handkerchief."

"You tell them about the germ enemies, Yellow, will you?" interrupted Mercury yawning. "I'm sleepy." He stretched out on top of the wall and was soon fast asleep.

Yellow smiled. "He's a fine teacher, isn't he?" He put down his bow and leaned back, holding one knee in his hands. "You really can't see germs, you know. They're so very tiny that they are invisible. But here in their own country the bad ones take off their disguise of littleness, and so you can see them."

"Why, are there good germs?" asked Sally in surprise.

"Certainly!" replied Yellow. "There is a story about a time very early in the history of the world when all the germs were good. I don't know how true it is, for I was a youngster at the time. All the germs, or microbes as they are often called, were friends of the people. They raised bread, helped make butter and cheese, turned apple juice into vinegar, and made things grow

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by putting magic into the soil, just as the good microbes do to-day. Every one was happy and there was no such thing as sickness in the world."

Yellow moved closer to the children and spoke very low. "Then one day, they say that Mercury appeared on earth carrying a large box and a little girl. He left them both in the cottage of a boy named Epimetheus, and told him on no account to open the box. But the little girl, whose name was Pandora, was very curious.

"Instead of going out to play with Epimetheus and the other children, she sat indoors all day long, wondering what was in the box. Finally she could stand it no longer and so she lifted the lid. And lo, out of the box flew all the troubles and germs of sickness that are in the world to-day. No one knows how the germs got in the box or where they came from. But it seems as if they were especially made to harm mankind, for the germs that cause sickness can live and grow only in the bodies of human beings and animals. Now mind, this is only a story, for I was much too young at the time to remember what really happened. But it is quite true that as far back as I *can* remember, germs of sickness have troubled the world. They have caused

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more trouble than all the wars that were ever fought.

"If you children would like to be as great heroes as Jack the Giant Killer or Saint George who killed the dragon, you will help fight the germs of sickness."

"How can we fight something that we can't see?" objected Tom.

"Ah, ha," said Yellow, "that's just the trouble. Those wicked little creatures had a beautiful time of it for ages and ages because they were invisible. Then along came a great man named Pasteur, who found them out. Since then they have had to fight for their lives. But they have a great many hiding places and ways of traveling about, so they are still our most dangerous enemies.

"Germs like to travel. They are always seeking new worlds to conquer. As long as they are traveling swiftly from one body to another, they are happy. If a well girl is foolish enough to kiss a person with a cold, some of the cold germs are almost sure to hop into her mouth from the sick person's lips. Germs never hesitate to slip out of a person's mouth to the rim of a cup from which many people drink, because they know that they

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will surely be able to pop back into some one else's mouth.

"Sometimes, however, the sickness germs are put out of one body and cannot find their way into another right away. A sickness germ outside the body is very unhappy, and it is always planning and scheming to get back. To do this, it hides on things that are likely to be put into the mouth.

"There was once a man named Douglas, who lived on the border between Scotland and England. He was always fighting the English. One time he wanted to get inside an English castle to capture it. So he and his men hid in a load of hay that was to be taken into the castle. When the hay cart had passed over the drawbridge, Douglas and his men drew their swords, leaped from the cart, and took the castle.

"Germs hide on your fingers and in food and water. They think that in that way they are sure to pass the drawbridge of the lips and capture the body castle. Children are likely to put things like pennies and pencils into their mouths and so the germs lie in wait for them there.

"But, my dears, you mustn't let the germs scare you. When you know where they are, it's easy to get the better of them. It's like a game of

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hide and seek. Pasteur first spied out the germs. Since then many brave and wise men and women have hunted out their hiding places. They can hide best in filth and dark places.

Can you give the law of the Land of Health that Tom is disobeying?

"Wash your hands with soap and hot water before eating. See that food is kept in closed cases in grocery stores, and that your milk comes from clean dairies. Help keep the streets and yards all neat and tidy. Then the germs will soon be on the run.

"Some of the germs, like the ones that cause scarlet fever and measles and diphtheria, are called

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contagious. Grown-up people in the Land of Health see that signs are put on the doors of houses where there are persons with contagious diseases. These signs tell well people to keep away so that the germs can't reach them.

"The way that germs like to travel best is by fly and mosquito airplane, as you will see." Yellow reached over and poked Mercury in the ribs. "Wake up!" he cried. "Aren't you going to take these children on a trip into the enemies' country?"

Mercury sat up and rubbed his eyes. "Where am I?" he asked. He looked around and saw Yellow and the children laughing at him. "Dear me," he cried, "now I remember. Has Yellow told you about germs?"

"Oh, yes!" exclaimed the children.

"Well, see if you can learn this law then, before we start.

"Sickness germs I must defeat,
And so I wash before I eat;
I never touch my nose or lips
With pencils, coins, or finger-tips.
I keep away from those who sneeze,
For they may have a germ disease;
And when I cough or sneeze or sniff,
I do it in a handkerchief."

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When the children knew the law, Mercury asked them these questions:

1. If you have a cold, how can you keep other people from catching it?

2. What are our most dangerous enemies? Who discovered them?

3. What are some of the things that good germs do to help us?

4. Janet has a baby sister. She is so sweet and pretty that when Janet wheels her out in her carriage, all the girls want to kiss her. Sometimes it makes them very cross because Janet won't allow any of them to do this. Do you think Janet is right or wrong? Why?

5. Some boys and girls chew or suck their pencils when they are working their examples or writing their spelling lesson. Why is this a dangerous habit?

6. Tell some of the ways in which germs can enter the mouth.

7. How can you protect yourself from germs?

8. How can you help protect other people from germs?

9. When children are recovering from a contagious disease like measles or scarlet fever, they should not play with toys which other children may use afterward. Try to think of some things that a child who has had the measles might do to amuse himself.

10. Perhaps your teacher will let you make a little play from the story of Pandora and Epimetheus. Some of your classmates may be the germs and you can pretend that they are shut up in one corner of the room. What will Pandora and Epimetheus say to each other? What will the germs say to Pandora?

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## CHAPTER XV

## THE AIRPLANES OF THE ENEMY

After the children had answered all the questions, Mercury told them to look carefully at the enemies' country through a spyglass that he gave them. A swamp stretched away from the foot of the wall, and from it an unpleasant humming arose. "That is Mosquito Swamp," said Mercury.

Beyond the swamp stood a tumble-down barn and farmhouse. A great pile of manure was stacked against the side of the barn. Two pale children and an untidy woman sat on the doorstep of the house. Through the spyglass the children saw hundreds of flies swarming around the barn. The flies then flew to a pigpen near by, and from there into the house.

The children had been so busy listening to Yellow that they hadn't paid much attention to what was happening on the wall. Now they saw that all the other courtiers of my Lord the Sun—Red, Orange, Green, Blue, and Violet—were also shooting germs. A thin bristly fellow, who looked very much like a toothbrush, was stamping



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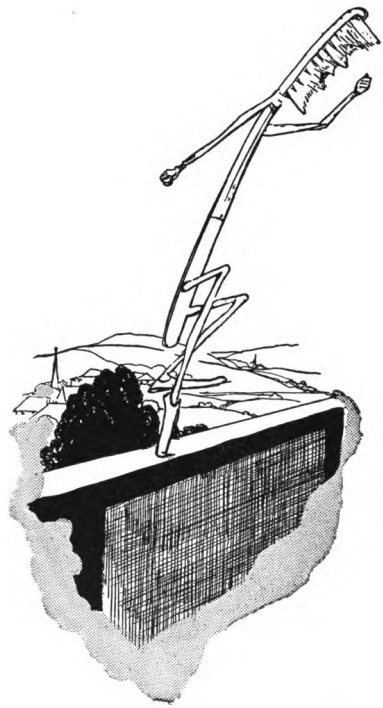
excitedly up and down, shaking his head furiously. Other strange-looking creatures were pouring boiling water over the wall or spraying the swamp with kerosene oil. Giant fly-swatters, waving back and forth, shooed away any flies that managed to reach the top of the wall.



Mr. Toothbrush shakes his fist at the enemy germs.

Tom and Sally felt the wall tremble. "The wall is moving!" cried Sally.

"Certainly," replied Mercury. "The citizens of the Land of Health are always fighting the enemy and winning too. When ground is won, the wall moves up to protect the conquered territory. Citizens of the Land of Health try never to let the enemy over the border. One way of keeping them back is this screen wall, which shuts out flies and mos-

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quitoes. You know, they are the airplanes in which the germs of sickness try to invade the Land of Health.

"The surest way to keep out these airplanes with their germ passengers is to destroy them. One kind of mosquito carries the germ of malaria; another kind carries the germ of yellow fever. These two germs are deadly enemies of the Land of Health. Doctors and other brave men spent a great many years of study and danger before they found out just how these germs were carried from one human body to another.

"Mosquitoes lay their eggs in stagnant pools, swamps, uncovered rain barrels, old tin cans full of rain water, or any other places where the water is still. That is why you see swamps and stagnant pools in the enemies' country.

"Citizens of the Land of Health drain the swamps and spray oil over stagnant pools. The oil spreads over the water and keeps air from the baby mosquitoes, so that they die. Good citizens also take away all tin cans that might hold rain water and they cover the rain barrels. Then the mosquito has no place to lay her eggs. By keeping the mosquitoes from bringing up reinforcements, citizens of the Land of Health are

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winning the fight over this branch of the enemy airplane service.

"Now, we're going to take a walk in the enemies' country," went on Mercury. "You will be invisible, and so the germs can't get at you. Yellow will come along with us. All the germs are scared to death of him. They scoot when they see him coming, because he kills them with the hot arrows of my Lord the Sun. Here's a fly-swatter for each of you, and be sure you use it. We'll sail over Mosquito Swamp."

The children seated themselves in the cap again and Yellow perched on the rim. Then they flew over the swamp and landed at the farm. A great swarm of flies hovered over it. "This is Fly Farm," said Yellow, "and I wish the citizens of the Land of Health would reach it soon and clean it up. It's a great nuisance. Let us watch one of the flies. I'll make a mark on one so that we won't lose track of it."

Yellow caught a young fly that was just starting out in the world. He rubbed his finger over its back until it shone golden in the sunlight. Then he let it fly away. It lit first in the pigpen, where it enjoyed a hearty meal. Then it flew into the barn and crawled around for a while.

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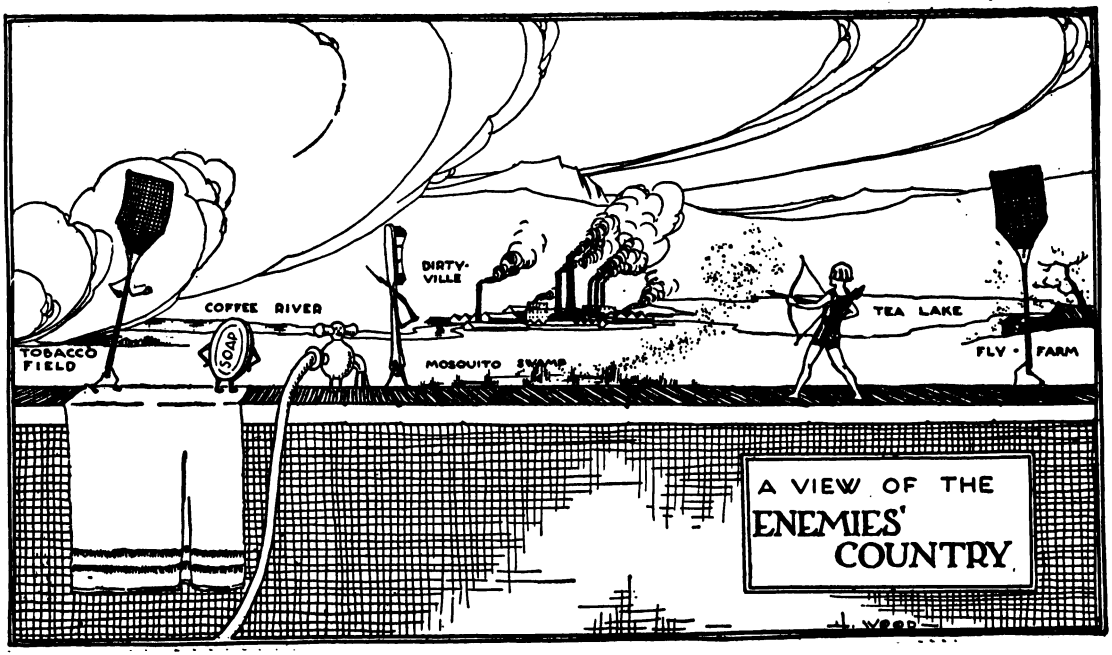


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A pump stood in the yard and an iron cup was fastened to it by a long chain. The fly flew to the rim of this cup and carefully wiped its feet on it. Sally saw the little girl, who had been sitting on the doorstep, dip the cup into a bucket that stood by the well and drink from it just after the fly had left it.

Then the fly led them a merry chase. Sally and Tom and Mercury and Yellow had to run to keep up with it. They found themselves chasing it down a village street. "This is Dirtyville," panted Mercury, as they followed the fly through the door of a grocery store. It walked over the dirty floor and then flew to an open box of sugar. Here was a feast, indeed. A little boy came in to buy some sugar, and the storekeeper scooped up a pound from the very spot where the fly had been standing. The fly followed the boy out of the grocery and so did the four adventurers. They all came to a cottage on the village street.

The fly at once crawled over the face of a baby who lay asleep in a carriage on the porch. Then he flew into the house through the unscreened window and sat on the spout of a milk pitcher. He ended his career by falling into the milk and drowning.

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As they walked away, Yellow caught another fly and showed the children its feet through a glass which he pulled from his pocket. By looking through this glass, they saw everything much larger than it really was. Yellow called it a magnifying glass. The children saw that the fly's feet were covered with tiny sticky hairs.

"All the filth and germs that the fly picks up by crawling over dirty places are carried to the food that it lights on later," Yellow explained. "Flies should be kept out of houses by tightly screened windows and doors. Citizens of the Land of Health wage war continually on the fly airplanes. If they manage to get over the screen wall, the citizens shoot them down with fly-swatters or catch them on sticky fly paper.

"The real way to get the better of them," said Mercury, "is to keep them from raising families. One single fly has over one hundred children at a time. If all the garbage cans are covered up, and all the piles of dirt and rubbish cleared away, Mrs. Fly won't have any place to lay her eggs. Then the citizens of the Land of Health will have conquered one of their worst enemies.

"When men first lived in countries like England

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and America, wolves were a great danger to the people. But year by year the forests were cleared and the hiding places of the wolves uncovered. Fields of corn and wheat and fruit

Taking away the hiding places of the enemies of health.

orchards took the place of the deep woods. Now in England the sheep graze at peace in the meadows, and little boys set to watch them no longer cry 'Wolf! Wolf!' at the sight of moving shadows. Red Riding Hood could visit her grandmother to-day in England, and not a wolf would she meet on the journey. Wolves can live and do harm

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only when they have places to hide and bring up their cubs. When the hiding places are taken away, the wolves disappear.

"That is what will happen to the germ enemies and their fly and mosquito airplanes when people learn to take away their hiding places."

"The enemies have a great many places to hide in here in Dirtyville," remarked Tom. He and Sally were having trouble in picking their way along the street because of the piles of rubbish in the way.

"I don't like *this* country," said Sally. "Let's go back to the Land of Health, Mercury."

"All right," consented Mercury. "There's not much more to see anyway. Coffee River and Tea Lake are back in the country a bit. Then there is Tobacco Field, east of Dirtyville." As Mercury was speaking, Tom noticed that a thick fog came rolling up behind them. It had a peculiar odor.

"That comes from Tobacco Field," explained Mercury, starting to run. "If it once overtakes us, we shall have a hard time finding our way back to the Land of Health. Tobacco smoke makes children's minds dull and keeps their bodies from growing. Children in the Land of Health

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never smoke cigarettes or any other form of tobacco."

Tom and Sally were glad to see the wall loom up ahead of them as they ran. On the edge of Mosquito Swamp Mercury lifted the children in his arms and flew with them to the top of the wall. There he asked them the following questions:

1. Why are flies and mosquitoes dangerous enemies to health?
2. In what ways can mosquitoes be destroyed?
3. Describe the travels of a fly, showing how it can spread the germs of sickness.
4. Name the ways in which you can keep places free from flies.
5. Make up a story about the journey of a germ that started off on a fly airplane.
6. When will you have to be especially on your guard against mosquitoes: in a dry summer or a rainy one?
7. When Mrs. Baxter puts the baby to sleep in his carriage on the porch, she always covers the carriage carefully with mosquito netting. Why does she do this?
8. Suppose you decide to start a war against the enemy in your school. You might call yourselves "The Mosquito Police" or "The Anti-Fly Brigade." What are some of the things you might do?

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## CHAPTER XVI

## CAREFULNESS

Mercury told the children that they must inspect Happy Village before receiving their citizenship papers. He suggested that they walk back to the village through the Land of Health. Sally and Tom loved to take walks, and so they begged Mercury to start out at once.

"All right," he agreed cheerfully.

They hadn't walked far in the direction of Happy Village when they caught up with a serious-faced lady who was going in the same direction.

"This is my sister, Minerva," Mercury said to the children. "She is very wise. These children's names are Tom and Sally," he explained to Minerva. "They are learning the laws of the Land of Health so that they can be citizens. They know all the laws now except the one on Carefulness. Do you feel like teaching it to them? You know more about it than I do, you know."

"Yes, I imagine I do," said Minerva with a smile. "This brother of mine," she said, turning



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to the children, "has a great many good qualities, but he has been known to do several foolish things. They say that when he was very young he stole the cattle of my Lord the Sun, or Apollo as he was then called, and hid them in a cave. When Apollo found it out, he was very angry, and if Mercury hadn't given him something that he wanted very much, I don't know what would have happened."

"I don't see why every one made such a fuss about it," grumbled Mercury.

"It is very dangerous to make the sun angry," said Minerva severely, "as the germ enemies can very well tell you. One of the gifts that my Lord the Sun gives the earth is fire," she went on. "It is one of the greatest friends of man, and without it human beings would be very miserable. But if you play with it and do not treat it with respect, it becomes very dangerous.

"I will tell you about a boy who once played with fire. It happened long ago when people thought that the god Apollo drove the chariot of the sun across the sky every day. Apollo had a son called Phæton. Phæton's school-fellows used to mock and jeer at him because he said he was the son of a god.

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"One day he could stand it no longer and he traveled to the palace of the sun, which lies in the Land of Sunrise. He came into the presence of Apollo and demanded proof of his relationship with him. Apollo promised to give him anything he wished for.

"The foolish boy then asked to drive the chariot of the sun across the heavens for one day. Apollo begged him to ask for anything else but that. Phæton refused to listen. Apollo sighed and led him to the golden chariot of the sun, to which fiery steeds were harnessed. Phæton leaped to the seat and took the reins.

"Apollo told him not to go too high lest he burn the dwellings of the gods, or too low lest he set the earth on fire. He said 'The middle course is safest and best.' No sooner, however, had the horses drawn the chariot into the heavens than they discovered that Phæton didn't know how to guide them.

"They left the path and rushed in among the stars. One moment they were in high heaven; the next they dashed almost to the earth. The clouds smoked and the mountain tops took fire. Whole cities were burned to ashes. At last Jupiter, the king of the gods, hurled Phæton from the

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chariot with a thunderbolt, or the whole world would have burned up.

"It is very foolish to do dangerous things, as Phæton did, because other children jeer at you. Grown-up people know that fire must be handled carefully, to be safe. They have learned not to come too close to it, and never to play with it. Only grown-ups can guide fire on its safe middle course, so that it keeps you warm and cooks your food without harming you.

"You should never play at striking at matches. You mustn't make bonfires unless a grown-up person is helping you, and remember that it is always safest not to come close to any kind of fire. Fire leaps up with a roar when gasoline or kerosene comes near it, so never throw either on a fire. If your clothing should ever catch fire, do not run, but lie down and roll on the ground, or wrap yourself in a coat or blanket.

"Water is another one of the friends that you must be careful about. If you can't swim, never wade out into deep water, or play on bridges and banks above streams. When you are in a rowboat, sit quietly.

"One of the most powerful friends that you

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have is electricity. He lights your houses, moves trolley cars and trains, and performs more wonders than all the gods together could do in the old days. The electricity you use travels in

A whole street is fenced off for roller skating in the City of Safety First.

wires. Most wires are guarded so that the electricity can't jump out, but sometimes electricity cannot do the work it has to do if it is covered up. It is safest never to handle any wires, for the touch of electricity is very dangerous."

Minerva stopped talking just as the little party

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came to the outskirts of a city. "This is the City of Safety First," said Mercury. Tom and Sally noticed that when children wanted to cross the crowded streets, they waited for the policeman to tell them to start. They came to one street that was fenced off, and here crowds of children on roller skates were shouting and racing back and forth, without having to dodge automobiles.

A trolley car stopped near by, and Tom saw that the boy who stepped off faced forward as he left the car.

"City streets are another thing to be careful about," said Minerva. "Boys, especially, like to dash in and out of traffic on roller skates. They think it great fun to steal rides on moving trucks and wagons."

Tom grinned. "The fellows call you 'fraid cat' unless you do," he said.

"That doesn't prove that you really are afraid, does it?" asked Minerva frowning. "People who are really brave never have time to do foolish things. There are so many things in the world to be brave about that it isn't necessary to make up extra dangers to prove your courage. Don't you think it would look silly for a fireman to wave a tin can full of burning paper around his

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head to prove that he isn't afraid of fire? Or for the member of a life-saving crew to rock a boat just to show that he isn't afraid of water?

"Brave people don't do dangerous things unless it is necessary. You know that life is the most wonderful thing in the world. If you do silly things, like jumping on the back of moving wagons or playing with fire, you are putting your life in danger.

"Perhaps you have heard people say, 'He is as timid as a mouse.' Mice are great cowards. Once they had a meeting and decided that the only way to be safe was to hang a bell around Mrs. Cat's neck so that they would hear her coming. And yet not one single mouse could be found who would face the very real danger of 'belling the cat.'

"The next day two mice who had been at the meeting came upon a mouse-trap. 'What a queer-looking thing!' said one. 'It has toasted cheese in it too, um—um!'

"'I know where to find some cheese on the pantry shelf,' said the other. 'I don't like the look of that thing.'

"'Fraid cat!' jeered the first mouse. 'I dare you to put your head in.' Of course, the two little

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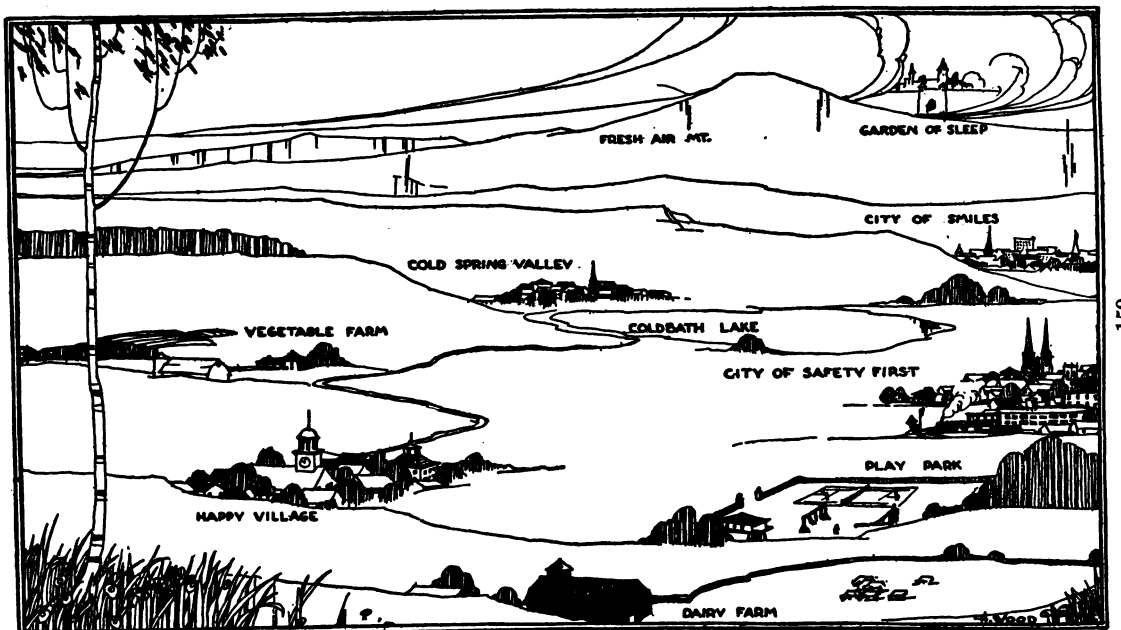




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mice had to stick their heads in after that, and click! they were caught fast. If they had died belling the cat, they would have been remembered forever as great heroes. As it was, the old grandfather mice shook their heads gravely and said, 'How very silly!'

"Always remember this: It isn't a proof of courage to take a dare. Brave people fear danger. They face it only to save the lives of others or to do their duty. They never risk their lives to 'show off' or to do foolish things. They know that they can have just as much fun doing safe things as dangerous ones."

Tom looked serious and nodded his head. "I'll remember," he promised. Then he shouted, "Why, we're almost in Happy Village. I see the red roof of the farmhouse."

"So we are," said Minerva peering ahead. "You have just time to learn the law of carefulness, and to answer the questions on the lesson before we reach it."

This is the law:

I must be careful about fire
And crowded streets and hanging wire;
I must not take a foolish dare
Or play with danger anywhere.

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These are the questions that Tom and Sally answered:

1. Name three things that are your friends when you treat them properly and your enemies when you are careless with them.

2. How can we be careful about fire?

3. Elsie and Ted were in the living-room when little Ethel ran too near the open fire. As her light dress flamed up, Elsie opened the outside door and screamed for help. Ted pulled Ethel to the floor and rolled her up in the big rug. Why was Elsie's action dangerous? Why was Ted's wise?

4. Tell the story of Phæton and the chariot of the sun.

5. How can we be careful about water?

6. How can we guard against harm from electricity?

7. What is the proper way to step off a trolley car?

8. What is the proper way to cross a crowded street?

9. Bob likes to dash across the street while the traffic is moving. He says, "Why not? The policeman has never caught me at it." What do you think of his remark?

10. Mr. Perkins was burning a great heap of leaves in his front yard. Two boys came along. "I dare you to jump over that fire," said one of them. Do you think the other boy should have taken the dare? Why?

11. Why is it not a brave thing to take a dare?

12. Tell a story to show that taking a dare is not a proof of courage.

13. Make a set of safety rules regarding things that you yourself need to be especially careful about.

14. Imagine that you live in a big city. You are talking to your cousin who lives in the country. Describe a playground in a fenced-off street and tell about the games that are played there.

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## CHAPTER XVII

## HAPPY VILLAGE

Minerva left the party at the outskirts of Happy Village, but Mercury stayed with the children, as he was to guide them on their tour of inspection. "We'll go into the barn of the farm first," said Mercury.

Inside the barn they found the farmer washing his hands at a faucet set in the wall. "He's going to milk the cow," whispered Mercury. "In the Land of Health all cows are milked with clean hands."

The children followed the farmer as he went with his shining pail into the cow's stable. It was sweet-smelling and clean. After the farmer had milked his pail full, he gave each of the children a drink.

Then Mercury and the children left the farm and walked down the village street toward the grocery store. "The cities of the Land of Health get their milk from big dairy farms where hundreds of cows are kept," explained Mercury as they went along. "Every single cow is kept as



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clean as the one you have just seen. The cans in which the milk is sent to the cities are scoured every day until they shine.

"Every person who handles the milk, from the men who milk the cows to the men who put the bottles on the doorsteps in the cities, must be very careful that the milk is kept pure and clean. The people who use the milk are careful about it too. They never leave it in an uncovered bottle or dish. They wash off the top of the bottle before they pour out the milk and they keep the milk in a cool place."

By this time the little party had arrived at the grocery store. The grocer was standing on the steps looking up at the sky. A great white apron almost covered him from top to toe, and he smiled all over his fat red face when he saw the children. "A fine day! A fine day!" he exclaimed, rubbing his hands.

"Mr. Button, this is Tom and this is Sally," said Mercury, introducing them to each other. "They have come to inspect your grocery store."

"Well, this is a surprise," said Mr. Button, opening the screen door. "Walk in! Walk in! I'm always glad to have callers."

A long counter with glass cases covering half

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of it ran along one side of the room, and on the other side stood a row of bins, barrels, and boxes. In the back Tom saw a butcher's block. Rows and rows of tin cans lined the shelves around the

The enemy germs can't do any harm in this grocery store.

walls. The store was spotless. Sally couldn't see a single fly.

"You can see, children," said Mercury, "that all the food is kept covered. The meat is in a cold room at the back. A fly wouldn't find anything to eat, even if he could get in."

Mr. Button bustled about and showed the children where he kept everything. Diving down into the cool depths of a barrel, he came up with two shiny red apples. Tom reached out his hand.

"Not so fast, young man," said Mr. Button.

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"You're in the Land of Health, you know." He went to a faucet behind the counter, washed the apples, and dried them on a clean cloth.

"Can't be too careful," he said, giving each of the children an apple. "We think we have conquered the enemy germs, but they manage to hide themselves, even in the Land of Health. I know them! They can't fool me." His face became so red with rage that Tom was sure it would burst.

"Thank you very much, Mr. Button," said Mercury, drawing the children to the door. "We must go now. We have to inspect the school before closing time."

"Sorry you can't stay longer," replied Mr. Button, calming down as he opened the door. "Come again, won't you?"

When the party was in the street once more, Sally almost doubled up with laughter. "What a funny little man!" she exclaimed.

"Yes," said Mercury smiling, "but he knows his business. He is very kind-hearted, but the very thought of germs puts him in a great rage. Here we are at the school," he went on, opening a little gate.

The schoolhouse was of red brick. It was sur-

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rounded by a large playground. A baseball diamond was laid out at one side, and under an elm tree in the corner were swings and sand piles. Mercury and the children marched up to the door of the schoolhouse. "This is a three-room school," whispered Mercury, walking in without knocking.

Across the hall through a partly opened door, Tom and Sally saw a pleasant, sunshiny room with the windows open, top and bottom. Mercury poked his head through the opening and caught the teacher's eye. She nodded and smiled, and Mercury turned to the children behind him. "It's all right," he whispered, "we can go in."

They tiptoed in and took seats at the back. Tom and Sally saw that the children were about their own age. A scale stood against one wall, and beside it hung a sheet for putting down the heights and weights of all the children.

"Do you see that all the children are sitting with backs straight and feet touching the floor?" whispered Mercury.

A water cooler stood near the teacher's desk, and Tom saw one boy make himself a paper cup and then get a drink. "I'll show you how he

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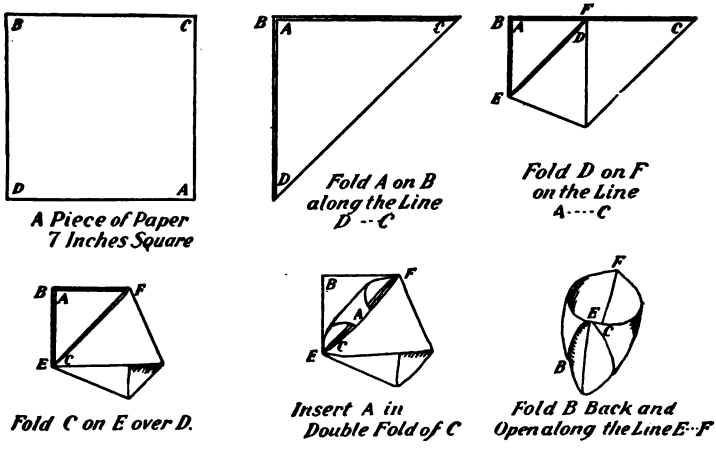
did it," said Mercury, pulling a piece of paper out of the desk at which he was sitting. Soon Tom found that he could make a cup as fast as any of the other children.

Then the teacher spoke to Mercury. "It is time for the class in the government and history




This is how Mercury taught Tom to make a paper drinking cup. See if you can make one.

of the Land of Health," she said. "Would you and your friends like to stay and hear the children recite?"

"Yes, indeed," replied Mercury. "We'd like it very much."

The class moved to the front of the room and sat down.

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"John," began the teacher, "please describe the government of the Land of Health."

John, a rosy-cheeked boy, stood up. "The Land of Health is governed by Queen Nature and her ministers, Mr. Wind, Madame Rain, my Lord the Sun, Sir Food, and Lady Sleep. Queen Nature makes the laws and the ministers see that they are carried out. Judge Scales can tell Queen Nature whether the citizens have obeyed the laws or not.

"Citizens must be weighed each month and measured every four months. If they weigh what they should for their height and age, Queen Nature knows they have been keeping her laws. If any citizens are below their proper weight, they must leave the country. They can come back just as soon as Judge Scales tells Queen Nature that they are keeping the laws again."

"That is very good," said the teacher, smiling at John. "Dorothy, please tell us how Happy Village won a place in the Land of Health."

Dorothy began talking before she left her seat. "Happy Village was once called Grumpytown. It was just over the border in the country of the enemy. One day a boy named Jack, who lived in the town, thought he would like to see the

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world. He was an unpleasant little boy and very dirty. One night he managed to crawl through a hole that he cut in the screen wall with a pocket knife. He wandered along through the dark until just at dawn he came to the City of Smiles.

Grumpy Jack sees a smile for the first time in his life.

The first person he met was a red-cheeked old lady, who held up her hands and said 'Alack-a-day!' when she saw Jack. 'How did such a very dirty little boy ever get into the Land of Health?' she wondered out loud. Then she smiled.

"A queer thing happened to Jack. He felt warm and cosy inside. He had never seen a smile before. The old lady took him into her

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cottage, washed his face and hands with warm water and soap, and gave him a large glass of milk and a thick slice of brown bread and butter. Jack had never tasted anything so good in his life before. He liked the old lady and her smile so much that he stayed with her a long time.

"He was a curious boy, you remember, or he would never have wanted to go out and see the world. While he was in the City of Smiles, he learned what a village or a city must be like to be in the Land of Health. He also learned to smile.

"One night he went back to Grumpytown. He could hardly squeeze through the hole he had made in the wall because he had gained so many pounds. The next morning he went up and down the dirty streets smiling at every one he met, until all the people in the town felt pleasant inside. Then he stood up on a pile of boxes and made a speech. He told the people what he had seen in the Land of Health and how fine it was to belong to that country. A few old graybeards shook their heads, but Jack and his smile carried the day.

"A Village Improvement Society was formed with Jack at the head. He soon had all the boys

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# Class-Room Weight Record

| Name | Age | Height | Normal Weight | YEAR | ACTUAL WEIGHT | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June |
| Edwin W. Allen | 10 | 58 in | 62 | | | | | 69½ | 68 | 65½ | 63 | | |
| Raymond Bowers | 9 | 52 | 64 | | | | | 69 | 68 | 68½ | 70 | | |
| Russell Carlson | 15 | 61 | 99 | | | | | 95 | 96½ | 97½ | 99½ | | |
| Howell Clayton Beck | 11 | 55 | 75 | | | | | 78 | 80 | 78½ | 79 | | |
| Marion Clayton | 11 | 63 in | 68 | | | | | 58½ | 59 | 61½ | 59 | | |
| Katherine Cook | 10 | 54 in | 66 | | | | | 58½ | 63 | 61½ | 60 | | |
| Oscar Danner | 11 | 54 | 71 | | | | | 75 | 75 | 74½ | 79 | | |
| Thomas Dolan | 12 | 61 | 93 | | | | | 89 | 90 | 91½ | 90 | | |
| Joseph Fulman | 11 | 58½ | 84 | | | | | 116 | 113½ | 123½ | 125 | | |
| George Hankins | 11 | 56 | 79 | | | | | 88 | 90 | 89½ | 90 | | |
| Bertram Henderson | 12 | 56 | 79 | | | | | 71 | 71 | 70½ | 72 | | |
| Norman Hulick | 10 | 56 | 77 | | | | | 79½ | 76 | 78 | 80 | | |
| Ruth G. Howes | 11 | 56 | 77 | | | | | 77 | 75 | 72½ | 75 | | |
| Tomi Kubota | 12 | 57 | 82 | | | | | 75 | 76 | 76 | 77½ | | |
| Lottery Pullen | 11 | 56 | 79 | | | | | 74 | 78 | 76 | 78 | | |
| Ada Terjung | 9 | 52½ | 64 | | | | | 64 | 65½ | 67 | 67 | | |
| Marion Sally | 10 | 57 | 80 | | | | | 81 | 81½ | 82½ | 84 | | |
| Howard Stitt | 9 | 52 | 64 | | | | | 58 | 59 | 59 | 60 | | |
| Oliver Thomas | 12 | 57 | 83 | | | | | 95 | 95 | 96½ | 98 | | |
| Edward Tindall | 12 | 56 | 79 | | | | | 71 | 75 | 75 | 96 | | |
| Boyd Tyndall | 13 | 61 | 97 | | | | | 112 | 114½ | 116 | 116 | | |
| Milligan Tyre | 9 | 53 | 67 | | | | | 66½ | 67 | 68 | 70 | | |
| Theodore Utterley | 11 | 53 | 65 | | | | | 68½ | 70 | 72½ | 73 | | |
| Margaret Wright | 11 | 56 | 76 | | | | | 82 | 82 | 83 | 81 | | |
| Vernon Ward | 12 | 56 | 81 | | | | | 86 | 89 | 88½ | 96 | | |
| Lillie Levine | 10 | 55 | 79 | | | | | 66 | 67½ | 68½ | 65 | | |
| Cornelius Shipe | 16 | 62 | 104 | | | | | 106½ | 108 | 109 | 111 | | |
| Emmie P. Bowles | 11 | 56 | 76 | | | | | 101 | 102½ | 104 | 105 | | |
| Paul Wright | 14 | 62 | 102 | | | | | 97 | 98½ | 99 | 102 | | |

**When Tom and Sally visited the schoolroom in Happy Village, they noticed that the children wrote their own names and what they weighed each month on the Class-Room Weight Record.**

(Upper portion of Class-Room Weight Record. Used by courtesy of the Child Health Organization of America.)



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and girls picking up papers and tin cans and fruit skins from the sidewalks. Trees and flowers were planted along all the streets. The grown-up people had a meeting and voted money for a Street Cleaning Department and a Board of Health. Every citizen painted his house and cleaned up his own dooryard The people in Grumpytown had never liked each other, but as soon as they learned to smile, they found it was fun to play and work together.

"The citizens of the Land of Health didn't know what was going on in Grumpytown. Jack wanted to surprise them. One morning when the town was as clean and lovely as it is to-day, Jack went over to the wall and invited Yellow and Mr. Wind to pay a visit to the village. They didn't want to go at all, because they hated Grumpytown and had always been treated very rudely whenever they had been there before. But they thought it was their duty to go.

"They were the most surprised persons you ever met when they saw the beautiful place Grumpytown had become. They ran back to the wall and gave an order. The wall rose right up in the air and sailed over the town and came down on the other side. Queen Nature was so

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pleased that she renamed the town Happy Village."

Sally clapped her hands. "Oh, what a lovely story!" she cried. Then she looked frightened. She had forgotten she was in school. The teacher smiled at her. "It doesn't matter," she said kindly. "It's almost time for school to be dismissed. We will all go, after Peter has told us the duties of the Happy Village Board of Health."

Peter jumped to his feet. "The Board of Health is responsible for the health of the whole community," he began. "If a germ should manage to find its way past the guardians of the wall, and give a boy or girl measles or scarlet fever, the Board of Health sees to it that the disease doesn't have a chance to spread. Special doctors and nurses belonging to the Board of Health spend all their time guarding the health of the citizens."

When Peter had finished his recitation, the teacher dismissed the school. Tom and Mercury and Sally marched out with the school children. Across the street from the school the Town Hall stood. "We will visit that next," said Mercury with a twinkle in his eye, "and on the way, I will ask you the questions."

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These were his questions:

1. How is milk taken care of to keep it clean?

2. Think of some grocery store that you know. Describe it and tell why you think the food from it would be clean or dirty.

3. Eleanor was very small. She wanted to sit in one of the back seats in the classroom where the taller girls sat. Why do you suppose the teacher would not let Eleanor change her seat?

4. "Nancy is a selfish girl," said Elsie. "She tore up her paper drinking cup after she had used it instead of letting me use it." What do you think about Nancy?

5. In what way can your teacher or your parents tell whether you have been keeping the rules of health?

6. What do you think were the main reasons that Grumpytown became Happy Village?

7. What does the Board of Health do for a town?

8. If Jack had started an Improvement Society in your town, what would he have found to do?

9. Make up a little play about Grumpytown and Happy Village. The play may begin where Jack comes back from the Land of Health.

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## CHAPTER XVIII

## FULL CITIZENSHIP IN THE LAND OF HEALTH

"We'll go to the courtroom first of all," said Mercury as he and the children entered the Town Hall. Tom and Sally tiptoed breathlessly up the wide marble steps. They knew that something was going to happen, for Mercury had been chuckling and winking at every one he passed. At last they reached the big double doors of the courtroom. The children saw Yellow standing in front of them.

"Goodness, but you're slow," he grumbled. "We've been waiting for you fifteen minutes."

"Well, well," said Mercury cheerfully, "no one ever called me slow before."

Yellow didn't pay any attention to him. "Shut your eyes, children," he said excitedly. Tom and Sally screwed up their eyes tight. Mercury took hold of Tom's hand and Yellow held Sally's. "Now!" cried Yellow, "open your eyes."

"Open your eyes, children," said a kind voice that they seemed to know.



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Tom and Sally stood blinking in astonishment at what they saw when their eyes flew open. On a high seat at the front of the room sat Dame Nature in a beautiful gown of green velvet. She wore a crown of apple blossoms. At her right hand sat Sir Food and Lady Sleep, and at her left were Mr. Wind and Madame Rain. Sir Food had on new red trousers, a yellow waistcoat, and a high white collar. He had left off his cap and apron in honor of the occasion. He winked at Tom very solemnly.

At Dame Nature's feet sat the six courtiers of my Lord the Sun: Red, Orange, Yellow, Green Blue, and Violet. Yellow grinned at Tom. "Don't you wish you could change places as quickly as I can?" he called.

"Silence!" thundered a voice from the right side of the room. Both children turned to see who had spoken. They saw Judge Scales standing on a platform. He looked stiffer than ever. "Come over here, you two," he said, clearing his throat.

The teacher was standing beside the platform and all her children were sitting in seats facing it. The teacher told Sally to step up on the platform. Then she pulled a rod out of one of Judge

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**Tom and Sally, when their eyes flew open, found themselves before Dame Nature and her ministers.**



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Scales's pockets and measured her. After that the Judge rattled a great deal and cleared his throat several times. Finally he announced: "She weighs 58 pounds. How tall is she and what is her age?"

"She is 50 inches tall and she was nine on her last birthday," said the teacher.

Judge Scales's face broke into a smile. "Good!" he cried. "Congratulations! You have passed the first test with high honors. Now, young sir, let us see if you can do as well as your sister."

Tom stepped boldly on the platform and was measured. After more clanking and rattling, the Judge said, "63 pounds."

The teacher then announced: "He is 51 inches tall and he was ten years old on his last birthday."

"Well, upon my word!" said the Judge, "you have done very well, young man. They both weigh exactly the number of pounds they should, Madame," he said, turning to Dame Nature. "I recommend that you proceed with the rest of the examination."

Mercury, who had been standing near the door, now led the children to the foot of the throne on which Dame Nature sat surrounded by her

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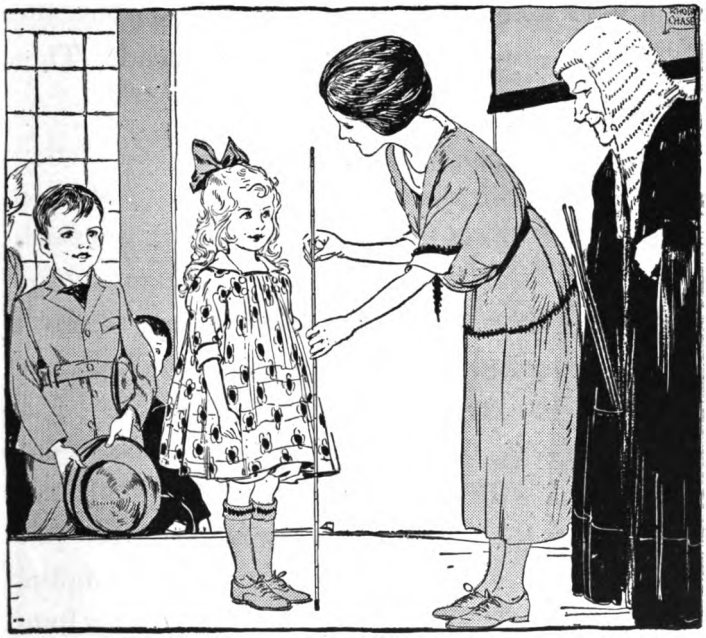
ministers. "I am so glad that you have passed the weight test," said Dame Nature smiling. "The rest will be easy. You may begin," she said, nodding to Mr. Wind.



Sally begins her examination for citizenship papers.

Mr. Wind puffed out his cheeks to look very fierce, but Tom saw the twinkle in his eye. "Tom," he said, "what is the law about fresh air?"

Tom recited promptly:

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"I must always breathe fresh air
In rainy weather and in fair."

"Right!" said Mr. Wind. "Sally, repeat the law on exercise."

Sally looked a little frightened, but she put her shoulders back and held up her head. Then she remembered this law:

"I must hold my body straight,
Bold and fearless, all day long.
I must try, in work and play,
To make my muscles firm and strong."

She said it so well that every one clapped. Mr. Wind looked as if he were very much pleased with himself. He bowed to Dame Nature. "Madame," he said, "these children are a great credit to me. I pass them with honor to Madame Rain."

Madame Rain stepped forward, patter—patter. "Tom," she tinkled in a voice like falling water, "please tell us the third law of the Land of Health."

Tom cleared his throat, and then gave this law:

"Four glasses full of water
I must drink each day;
If I'm not sure
That it is pure,
I'll boil the germs away."

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Madame Rain nodded and smiled. "Please recite the law of cleanliness, Sally."

Sally felt very sure of herself now. She spoke her lines in a good clear voice:

"I must give the best of care
To my skin and to my hair;
Twice a week at least, I know
That I must bathe from head to toe."

"Now then," said Madame Rain, "both of you show these people how to clean their teeth."

Tom and Sally grinned, showing their own white, even teeth. Then they chanted together, making the motions with their hands:

"Up and down,
And round and round,
I brush my teeth,
To keep them sound.
To keep them sound
And clean and white,
I brush them morning,
Noon, and night."

Every one laughed and clapped. Madame Rain's face looked like a rainbow. "I'm proud of you," she said to the children. "I pass you to Sir Food."

Sir Food bustled forward and stuck one hand

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in his yellow waistcoat. He puckered his brow and thought for a moment. Then he looked at Tom. "Attention, young man! What is the law about food?"

Tom spoke up briskly:

"The proper foods for me to eat
Are simple ones and clean.
A pint of milk each day I need,
And vegetables green.
The time to eat is during meals,
And never in between."

Sir Food rubbed his hands with glee. "Very good," he exploded. "Now, Sally, what is the law about removing waste from the body?"

Sally replied quickly:

"Every day I must take pride
In cleaning out myself inside."

Sir Food nodded at her pleasantly, and then asked Tom to give the law about stimulants.

Tom chanted:

"Coffee, alcohol, and tea,
I know are very bad for me."

Turning to Lady Sleep, Sir Food announced grandly: "I pass them both. They are now ready for your examination."

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Lady Sleep in a low voice asked Tom and Sally to repeat the law on sleep together.

They promptly recited:

"To keep my body at its best,
Eleven hours I must rest.
At eight to bed and up at seven
Will surely count up to eleven."

The six courtiers of my Lord the Sun began to count very fast on their fingers. Every one watched breathlessly until they had finished. "Right!" cried Yellow at last. "Now then, Tom, what does sunlight do to germs?"

Tom shouted:

"If you want the germs to run,
Let them see my Lord the Sun!"

"And what should you do, yourself, to be sure not to get germ diseases?"

Tom continued:

"Sickness germs I must defeat,
And so I wash before I eat;
I never touch my nose or lips
With pencils, coins, or finger-tips.
I keep away from those who sneeze,
For they may have a germ disease;
And when I cough or sneeze or sniff,
I do it in a handkerchief."

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Yellow turned to Sally. "What do you know about clothes?" he asked.

Sally answered:

"Wool or cotton, fur or leather,
Proper clothing suits the weather;
Loose it is from neck to feet,
And always tidy, clean, and sweet."

"I'm just in time, am I not?" said a voice from the door. Tom and Sally turned to see Minerva standing there with an owl perched on her shoulder. "Tom," she said, "tell them the law about carefulness."

Tom had it on the tip of his tongue:

"I must be careful about fire
And crowded streets and hanging wire;
I must not take a foolish dare
Or play with danger anywhere."

"Be sure you don't forget it," said Minerva, as she turned to go.

Dame Nature then stood up. "Tom and Sally," she said, "you have done very well indeed. We are all glad to welcome you into full citizenship in the Land of Health. First you must make the promise of allegiance. Judge

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Scales," she said, turning to that gentleman, "will you read it to them?"

The Judge stood up and felt around in his pockets. At last he pulled from one of them a paper that he unrolled with great ceremony. "Hold up your right hands," he commanded. "Now repeat this promise after me." The room became very still as first the rumbling voice of the Judge, and then the clear high voices of Tom and Sally recited this promise of allegiance:

> **I promise to obey all the laws of the Land of Health as long as I live. I will work with others to fight the enemy germs, and to extend the territory of the Land of Health.**

Then the Judge took two more papers from one of his pockets and handed them to Dame Nature. As she gave them to Tom and Sally, all the people in the courtroom stood up. They watched with eager eyes as the children read their certificates of citizenship in the Land of Health.

"Read it out loud," cried Yellow to Tom, as if he couldn't keep still any longer. And this is what Tom read:

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To All Whom It May Concern

This is to certify that *Tom* weighs what he should for his height and age.

His cheeks are rosy, his eyes are bright, and he holds himself straight.

He knows all the laws of the Land of Health.

He is hereby admitted to full citizenship in the Land of Health, to enjoy all the rights and privileges, and to share all the duties that citizenship brings with it.

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# EXERCISES THAT HELP YOU TO BE STRONG AND WELL[1]

## By Walter Camp

Here are a few exercises or games that will help every boy and girl to become stronger and better at his games and his work. These games are called setting-up exercises. They are exercises to make the body grow properly, to make you stand properly, to enable you to have good lungs and a good heart, and to have, as you grow up, a better chance for that health and enjoyment which is the best part of life.

With the descriptions below, and with the help of teachers or parents or big brothers, any child can easily learn to do these exercises.

### Winding up the Clock

The first of the exercises we will call "Winding Up the Clock," because, if you do it properly, you will make circles with your hands, while your shoulders feel as though they were turning, and your shoulder blades feel as if they were almost meeting at the back.

[1] Copyright, 1920, by Charles E. Merrill Co.



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Always stand squarely on the feet with heels separated about 5 inches, and feet pointing nearly straight forward, arms hanging easily at the sides, chest slightly raised, and head up.

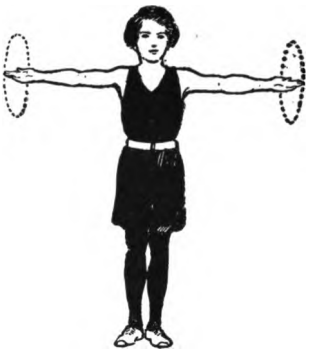

Fig. I.

First Exercise. Raise arms sideways to horizontal position. Turn the palms upward and force the arms back as far as possible. While in this position, count *slowly* from one to four, and at each count describe a complete circle about 12 inches in diameter, the arms remaining stiff and pivoting from the shoulders. Then reverse the direction of the circles, and do another four. See Fig. I.

## Playing the Bird

The second of these exercises we will call "Playing the Bird," for the motions, as you will easily see, are like those of a gull's wings, the arms and hands being lifted up to an angle of about 45 degrees and then lowered until they are horizontal. At the same time you go up on your toes and

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breathe in, filling the lungs as the arms go up, and letting the breath come out again as arms and feet go down.

SECOND EXERCISE. Raise arms sideways to horizontal. While taking a deep breath, raise the arms to an angle of 45 degrees, and also raise the heels until you are resting on the balls of the feet. Then, while you slowly let out the breath, come back to the original position, feet flat on the floor, arms horizontal. Be careful not to raise the arms more than 45 degrees, or return them to below horizontal. Do this four times. See Fig. II.

### UNDER THE LOW BRIDGE

The third exercise we will call "Under the Low Bridge." When you follow the directions, you will find that you are stooping down with your fingers pressed against the back of your head, but that you are looking up as if you wanted to make sure that you would go safely under the bridge.

THIRD EXERCISE. Raise arms, as before, to horizontal. Place hands behind the neck, index fingers touching, elbows forced back. While in this position, bend the body slowly forward from the waist as far as possible. Keep the head up as you go down, so that the eyes are still looking forward

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Fig. II.

Fig. III.

or toward the leader, if you are doing the exercise with a group of other children. Return to upright position, and bend backward just a little. Do not make these movements jerky and do not hurry through them. Repeat the whole movement, bending forward, then straightening up, then bending backward four times. See Fig. III.

### Drinking the Air

We will call the fourth exercise "Drinking the Air," for that is what it really is. By following the directions, you curl your fists up under your armpits, at the same time drawing in the breath and letting the head and shoulders go back until you are looking up straight in the air. Then, as you

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put the arms forward and commence to bend down, you breathe out, letting the air go slowly out of your lungs while the hands and arms go back past the body and up as high over your back as possible.

FOURTH EXERCISE. (A) Raise arms, as before, to horizontal. Move the right foot sideways

Fig. IV A.

Fig. IV B.

12 inches from the left. Slowly bend the fists and lower arms downward from the elbows. Then curl the fists upward into the armpits, bending the head backward meanwhile until you look upward at the ceiling. Take a deep breath as you bend the head back. Let the air begin to come out slowly, as you return to the original position, head erect, fists still in the armpits. See Fig. IV A.

(B) Then without resting, still letting the breath

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come out, extend the arms straight forward from the shoulders, palms down. Let the arms begin to fall and the body to bend forward from the waist, head up, eyes to the front, until the body has bent as far as possible, and the arms have passed the sides and been forced back and up as far as they will go. Another deep breath should be taken slowly as you curl your arms again, and exhaled as they come down once more.

Do the whole exercise (A and B) four times. See Fig. IV B.

### Swimming the Crawl

The fifth exercise we will call "Swimming the Crawl," that is, swimming the crawl stroke, for, as one arm and hand go up in the air, the other arm and hand slide down the side of the body.

Fig. V.

Fifth Exercise. Raise arms sideways to horizontal. Turn the left palm upward; then raise the left arm and lower the right, until the right is down close to the side, and the left is straight up overhead. Slowly bend the body sideways to the right from the waist, the right arm slipping down

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the right leg to or below the knee, and the left arm bending in half a circle downward over the head, until the fingers touch the right ear. Return to original position, with arms horizontal, and go down the other way, the left arm slipping along the left leg, the right arm bending downward in half a circle over the left ear. Do this four times. See Fig. V.

### Playing the Frog

The sixth exercise is called "Playing the Frog." Here, extending the arms sideways straight out from the shoulders, keeping the back straight and standing on the toes, you go down, gathering the legs under you just as the frog does when he is preparing to leap. You should be careful to keep on the toes and to keep the body well balanced.

Sixth Exercise. Move the right foot sideways until the heels are about 12 inches apart. Raise arms to horizontal. Rise on the ball of the foot. Bend the knees and, with the weight on the toes, lower the body almost to the heels, keeping the trunk as nearly erect as possible. Return to original position, knees straight, and let the heels go down to the floor. Do this four times. See Fig. VI.

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## Swaying in the Gale

We will call the seventh exercise "Swaying in the Gale," for when your arms are extended straight up against the ears, and your hands are clasped, the body is like the mast of a ship. You sway your body around in a circle, as the mast of a ship sways in a gale.

Fig. VI.

Fig. VII.

Seventh Exercise. Raise arms to horizontal. Stretch the arms straight above the head, interlock the fingers, arms touching ears. Then, the arms being still straight up, describe a complete circle about 24 inches in diameter with the interlocked hands, the body bending only at the waist. Do this three times.

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Then repeat the movement three times, in the opposite direction.

Go through the entire movement slowly and steadily, bending the body chiefly from the hips. See Fig. VII.

### Sowing the Wheat

The eighth exercise we will call "Sowing the Wheat." Keeping the arms extended and turning at the hips, you first place one hand on the ground, bending the knee on the side towards which you go down, and keeping the other knee straight. Then, having touched the ground with one hand, you swing up and, turning the body, place the other hand on the ground in the same way, bending the other knee.

Fig. VIII A.

Eighth Exercise (A) Move the right foot until the heels are about 12 inches apart. Raise arms to horizontal and turn the body to the left from the hips, the arms remaining horizontal until the face is to the left, the right arm pointing straight forward, and the left arm straight backward. See Fig. VIII A.

(B) While in this position, bend the body from

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the waist, so that the right arm goes down until the right fingers touch the floor midway between the feet, and the left arm goes up. The right knee must be slightly bent to accomplish this. See Fig. VIII B. Return to the original position, body erect, arms horizontal.

Fig. VIII B.

Reverse the movement, turning the body to the *right* this time until the left hand points straight forward. Then bend downward until the fingers of the left hand touch the floor. Return to the original position.

After you have mastered the exercise, you can go through it (A and B) in one continuous motion.

Repeat the whole exercise (A and B), first to the right, then to the left, four times.

### Learning to Fly

The ninth exercise is called "Learning to Fly." In this exercise you lift the arms straight up over the head, taking in a good breath at the same time. Then you begin to lean forward at the waist, letting the arms come down past the hips. At the same time you let out the breath from the lungs and carry the arms back above the shoulders as you

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did in the exercise of "Drinking the Air." By this time, the breath is out of the lungs, and as you bring the hands down past the hips and out in front of you, you begin to inhale. Then you spread the hands and arms apart, out to the horizontal, taking in a little more breath. By the time you finally lift the hands directly above the head, as in the first motion, you have a full breath of air in the lungs.

NINTH EXERCISE. Raise arms to horizontal, taking in a slow breath; then upward until they are straight overhead. Let them fall forward and downward, while the body bends forward from the waist, until the arms have passed the sides, and been forced upward and backward as far as possible, just as in Exercise 5, Fig. V. Remember, as you bend forward, to keep the head up, and the eyes to the front and let the breath come out.

Fig. IX.

Straighten the body upright again with the arms overhead, drawing in the breath. Lower the arms to the horizontal position, with the palms turned downward, and the arms and shoulders forced back hard. Then bring the arms out to horizontal, and begin the movement again by raising them as before.

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Repeat this entire movement slowly four times, forcing the air out of the lungs as the body bends forward, and filling the lungs again as the body straightens. See Fig. IX.

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## TABLE OF FOOD VALUES[1]

We measure the energy-producing value of foods in *calories*, just as flour is measured in pounds. A child of nine or ten needs about 1700 calories a day, and the average grown person needs 2500 calories a day.

In the following table, the second column shows the size of a portion of food containing 100 calories. The other columns show the relative amount of protein, fat, and carbohydrates (starch, sugar, etc.) in each food.

| Name of Food | Portion Containing 100 Calories | Per Cent of | | |
|---|---|---|---|---|
| | | Protein | Fat | Carbohydrate |
| Baked beans, canned | Small side dish | 21 | 18 | 61 |
| String beans, cooked | Five servings | 15 | 48 | 37 |
| Sweet corn, cooked | One side dish | 13 | 10 | 77 |
| Green peas, cooked | One serving | 23 | 27 | 50 |
| Potatoes, boiled | One large-sized | 11 | 1 | 88 |
| Apples | Two apples | 3 | 7 | 90 |
| Bananas | One large | 5 | 5 | 90 |
| Lamb chops | One small chop | 24 | 76 | 0 |
| Chocolate layer cake | Half ordinary square piece | 7 | 22 | 71 |
| Caramel custard | One cup | 19 | 10 | 71 |
| White bread | Ordinary thick slice | 13 | 6 | 81 |
| Graham crackers | Two crackers | 9 | 20 | 71 |
| Oatmeal | One and a half servings | 18 | 7 | 75 |
| Boiled rice | Ordinary cereal dish | 10 | 1 | 89 |
| Butter | Ordinary portion | 1 | 99 | 0 |
| Milk | Small glass | 19 | 52 | 29 |
| Eggs | One large egg | 32 | 68 | 0 |

[1] Based on tables in Fisher and Fisk's *How to Live;* used by permission of the authors.)



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## MEASURING YOUR WEIGHT

The Child Health Organization of America is trying to help the children of this country to grow strong and well by keeping watch of their weight and comparing it all the time with the growth that the really healthy child should make. The two tables (pp. 201, 202)[1] show just what the weight should be for a boy or girl of a particular height. Get your mother or your teacher to help you measure your height and weight. Then find your height in the left-hand column of the table and read across the table to the column with your age at the head of it. The figure you find there is the number of pounds you ought to weigh.

The United States Bureau of Education in Washington is very much interested in this campaign for the regular weighing of the children. It is trying to get "a scale in every school" and to have each child weighed once a month. A record should be kept in the classroom (on forms which can be obtained from the Department of Documents, Washington, D. C.) of the weight of each child for each month; and monthly report cards should be sent home for the parents to keep. In this way, growth is made a sort of friendly competition in which all the children of America can take part. "The children play the game; the teachers umpire; the parents keep score."

[1] Prepared by Dr. Thomas D. Wood, and copyright, 1918, by Child Health Organization.



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## HEIGHT AND WEIGHT TABLE FOR GIRLS

| Height Inches | 5 Yr. | 6 Yr. | 7 Yr. | 8 Yr. | 9 Yr. | 10 Yr. | 11 Yr. | 12 Yr. | 13 Yr. | 14 Yr. | 15 Yr. | 16 Yr. | 17 Yr. | 18 Yr. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 34 | 35 | 36 | | | | | | | | | | | |
| 40 | 36 | 37 | 38 | | | | | | | | | | | |
| 41 | 38 | 39 | 40 | | | | | | | | | | | |
| 42 | 40 | 41 | 42 | 43 | | | | | | | | | | |
| 43 | 42 | 42 | 43 | 44 | | | | | | | | | | |
| 44 | 44 | 45 | 45 | 46 | | | | | | | | | | |
| 45 | 46 | 47 | 47 | 48 | 49 | | | | | | | | | |
| 46 | 48 | 48 | 49 | 50 | 51 | | | | | | | | | |
| 47 | | 49 | 50 | 51 | 52 | 53 | | | | | | | | |
| 48 | | 51 | 52 | 53 | 54 | 55 | 56 | | | | | | | |
| 49 | | 53 | 54 | 55 | 56 | 57 | 58 | | | | | | | |
| 50 | | | 56 | 57 | 58 | 59 | 60 | 61 | | | | | | |
| 51 | | | 59 | 60 | 61 | 62 | 63 | 64 | | | | | | |
| 52 | | | 62 | 63 | 64 | 65 | 66 | 67 | | | | | | |
| 53 | | | | 66 | 67 | 68 | 68 | 69 | 70 | | | | | |
| 54 | | | | 68 | 69 | 70 | 71 | 72 | 73 | | | | | |
| 55 | | | | | 72 | 73 | 74 | 75 | 76 | 77 | | | | |
| 56 | | | | | 76 | 77 | 78 | 79 | 80 | 81 | | | | |
| 57 | | | | | | 81 | 82 | 83 | 84 | 85 | 86 | | | |
| 58 | | | | | | 85 | 86 | 87 | 88 | 89 | 90 | 91 | | |
| 59 | | | | | | 89 | 90 | 91 | 93 | 94 | 95 | 96 | 98 | |
| 60 | | | | | | | 94 | 95 | 97 | 99 | 100 | 102 | 104 | 106 |
| 61 | | | | | | | 99 | 101 | 102 | 104 | 106 | 108 | 109 | 111 |
| 62 | | | | | | | 104 | 106 | 107 | 109 | 111 | 113 | 114 | 115 |
| 63 | | | | | | | 109 | 111 | 112 | 113 | 115 | 117 | 118 | 119 |
| 64 | | | | | | | | 115 | 117 | 118 | 119 | 120 | 121 | 122 |
| 65 | | | | | | | | 117 | 119 | 120 | 122 | 123 | 124 | 125 |
| 66 | | | | | | | | 119 | 121 | 122 | 124 | 126 | 127 | 128 |
| 67 | | | | | | | | | 124 | 126 | 127 | 128 | 129 | 130 |
| 68 | | | | | | | | | 126 | 128 | 130 | 132 | 133 | 134 |
| 69 | | | | | | | | | 129 | 131 | 133 | 135 | 136 | 137 |
| 70 | | | | | | | | | | 134 | 136 | 138 | 139 | 140 |
| 71 | | | | | | | | | | 138 | 140 | 142 | 143 | 140 |
| 72 | | | | | | | | | | | 145 | 147 | 148 | 149 |

### About What a GIRL Should Gain Each Month

**Age:** 5 to 8..... 6 oz.
8 to 11..... 8 oz.
11 to 14.....12 oz.
14 to 16.....8 oz.
16 to 18.....4 oz.

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## HEIGHT AND WEIGHT TABLE FOR BOYS

| Height Inches | 5 Yr. | 6 Yr. | 7 Yr. | 8 Yr. | 9 Yr. | 10 Yr. | 11 Yr. | 12 Yr. | 13 Yr. | 14 Yr. | 15 Yr. | 16 Yr. | 17 Yr. | 18 Yr. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 39 | 35 | 36 | 37 | | | | | | | | | | | |
| 40 | 37 | 38 | 39 | | | | | | | | | | | |
| 41 | 39 | 40 | 41 | | | | | | | | | | | |
| 42 | 41 | 42 | 43 | 44 | | | | | | | | | | |
| 43 | 43 | 44 | 45 | 46 | | | | | | | | | | |
| 44 | 45 | 46 | 46 | 47 | | | | | | | | | | |
| 45 | 47 | 47 | 48 | 48 | 49 | | | | | | | | | |
| 46 | 48 | 49 | 50 | 50 | 51 | | | | | | | | | |
| 47 | | 51 | 52 | 52 | 53 | 54 | | | | | | | | |
| 48 | | 53 | 54 | 55 | 55 | 56 | 57 | | | | | | | |
| 49 | | 55 | 56 | 57 | 58 | 58 | 59 | | | | | | | |
| 50 | | | 58 | 59 | 60 | 60 | 61 | 62 | | | | | | |
| 51 | | | 60 | 61 | 62 | 63 | 64 | 65 | | | | | | |
| 52 | | | 62 | 63 | 64 | 65 | 67 | 68 | | | | | | |
| 53 | | | | 66 | 67 | 68 | 69 | 70 | 71 | | | | | |
| 54 | | | | 69 | 70 | 71 | 72 | 73 | 74 | | | | | |
| 55 | | | | | 77 | 74 | 75 | 76 | 77 | 78 | | | | |
| 56 | | | | | 77 | 78 | 79 | 80 | 81 | 82 | | | | |
| 57 | | | | | | 81 | 82 | 83 | 84 | 85 | 86 | | | |
| 58 | | | | | | 84 | 85 | 85 | 87 | 88 | 90 | 91 | | |
| 59 | | | | | | 87 | 88 | 89 | 90 | 92 | 94 | 96 | 97 | |
| 60 | | | | | | 91 | 92 | 93 | 94 | 97 | 99 | 101 | 102 | |
| 61 | | | | | | | 95 | 97 | 99 | 102 | 104 | 106 | 108 | 110 |
| 62 | | | | | | | 100 | 102 | 104 | 106 | 109 | 111 | 113 | 116 |
| 63 | | | | | | | 105 | 107 | 109 | 111 | 114 | 115 | 117 | 119 |
| 64 | | | | | | | | 113 | 115 | 117 | 118 | 119 | 120 | 122 |
| 65 | | | | | | | | | 120 | 122 | 123 | 124 | 125 | 126 |
| 66 | | | | | | | | | 125 | 126 | 127 | 128 | 129 | 130 |
| 67 | | | | | | | | | 130 | 130 | 132 | 133 | 134 | 135 |
| 68 | | | | | | | | | 134 | 135 | 136 | 137 | 138 | 139 |
| 69 | | | | | | | | | 138 | 139 | 140 | 141 | 142 | 143 |
| 70 | | | | | | | | | | 142 | 144 | 145 | 146 | 147 |
| 71 | | | | | | | | | | 147 | 149 | 150 | 151 | 152 |
| 72 | | | | | | | | | | 152 | 154 | 155 | 156 | 157 |

About What a BOY Should Gain Each Month

Age: 5 to 8.....6 oz. 12 to 16.....16 oz.
8 to 12.....8 oz. 16 to 18..... 8 oz.

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